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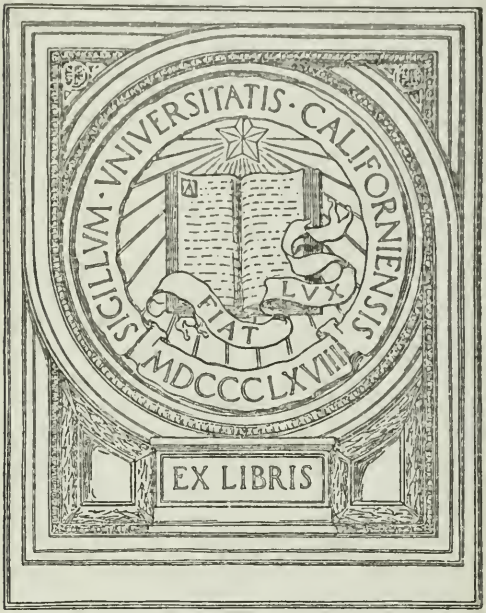

METHODS OF

INDUSTRIAL REMUNERATION

METHODS

OF

INDUSTRIAL REMUNERATION

BY

DAVID F. SCHLOSS

THIRD EDITION

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PREFACE TO THE THIRD EDITION

Since the earlier editions of this book were published,* a considerable amount of fresh and more detailed information bearing upon the questions, with which it deals, has become available. This is especially the case in regard to Profit-sharing and Gain-sharing (Bonus on Output), with respect to which the reports on these subjects compiled by the present writer for the Labour Department of the Board of Trade contain much matter serviceable for the purposes of this book. In order to utilise this new material and to bring the book generally up to date, it has been necessary to make the third edition larger than its predecessors. At the same time, a slight re-arrange-

* The first edition was published in 1892; the second edition (in which only a few verbal alterations were made) appeared in 1894.

ment of some parts of the work, which appeared to be desirable, has been made.* So far as diction, apart from substance, is concerned, it may be noted that a great part of the book has been practically re-written.

* Thus, while, in the earlier editions, attention was called in the chapters dealing with Time-wage and with Piece-wage to the common basis, which underlies all forms of wage-payment, this subject is now treated in a separate chapter. The chapter on "The Interference of Public Authorities in regard to Sub-contract" has been omitted; the chapters on "The Two Kinds of Co-operation", on "Why Industrial Co-operation rejects Profit-sharing", on "The true Import of the Co-operative Movement," and on "Practicable Co-operation" also disappear, as separate parts of the book, from the third edition. But all the material facts originally given in these chapters are re-stated in appropriate parts of the present edition, and will, it is believed, be easily found by the help of the Table of Contents and the Index.

April, 1898.

PREFACE TO THE FIRST EDITION

With the object of investigating the method of industrial remuneration the writer of the following pages has visited a large number of factories and workshops, mines, quarries, &c. Employers, on the one hand, and employees, on the other, have furnished many interesting details in regard to the manner in which labour is organized and remunerated. From both sides he has heard the views entertained by practical persons in relation to the advantages and the defects of the various methods.

Taking the particulars and the opinions thus collected for a basis, the writer has attempted to present a faithful delineation of the wage-system in all its forms, and of the several modifications introduced with a view to the improvement of that system. That his critical appreciation of these methods possesses any considerable value, he does not dare to hope. But facts are always valuable; and it is because he

has been able to get together, and has done his best to arrange in a systematic shape, a great number of material facts bearing upon an important branch of the Labour Question, that he ventures to publish the present volume.

In his inquiry into the position of Profit-sharing in the British Empire the author has received much assistance from Mr. T. W. Bushill, of Coventry; while in regard to Industrial Co-operation he has supplemented his own researches by borrowing, with acknowledgment, from Miss Beatrice Potter's admirable work on this subject some figures which it would have cost no little trouble to ascertain independently.

A small part of the matter has already appeared in *The Fortnightly Review*, *The Contemporary Review*, *The Charity Organization Review*, *The Economic Review*, or *The Economic Journal*; to the editors of these publications their contributor is indebted for permission to make further use of it here.

December 31*st*, 1891.

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METHODS

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INTRODUCTION.

What is known as the Labour Problem involves a number of distinct questions, prominent among which are those connected with, on the one hand, the amount, and, on the other, the method of industrial remuneration. It is with the latter of the two subjects just mentioned that it is proposed to deal in the following pages. The purpose of this book is to present a picture, as faithful as possible, of the prevalent system of industrial remuneration, and to describe the various modifications in this system which have been adopted with a view to its improvement.

The prevalent system of industrial remuneration, known as "the wage-system," is one, the main feature of which is the purchase by one set of men—the employers—of the labour of another set of men—the employed. Let us examine in detail the

nature of the conditions under which this bargain is carried out.*

At the summit of the industrial hierarchy we find the employer; below him stands a row of managers, foremen, and other superintendents; last come the clerks, artisans, and labourers. The employer fulfils a threefold function: he provides the capital—it may be his own or borrowed; he buys the raw material and sells the finished product; and he directs the process of working up the raw material, determining what goods shall be made and how these goods shall be made, settling what tools, machinery and motor power shall be used, and deciding what persons shall be employed, and what part each shall play, whether as manager, foreman, or workman, in the processes incidental to production. The employer is thus a capitalist, a merchant, and an organizer.

The foremen and other superintendents perform two (in some cases three) distinct functions. In many instances the foreman is a superior workman, himself executing, or assisting in the execution of some, usually of the more difficult, portions of the work; in all cases the foreman is, in the first place, a sub-

* The typical case referred to in the text is one in which a manufacturing enterprise is carried on upon a commercial basis by an individual employer. It is scarcely necessary to remark that there are many enterprises which are not commercial; as, for instance, the private gas-works attached to the mansion of a landed proprietor; or to remind the reader that the position of the employer is frequently occupied by a body of shareholders. For present purposes, however, it will be convenient to take as our typical instance a "one-man" business.

organizer, being allowed a potent voice in respect to the selection and discharge of the operatives, and arranging (subject to the supreme control of the head of the business) in what manner the work of these subordinates is to be performed, and, in the second place, an inspector, whose duty it is to see that this work is performed in accordance with the contract between the workmen as wage-receivers and his principal as wage-payer.

By selling the produce of his factory the employer obtains a fund out of which he defrays the cost of all materials and plant, rent, and other outgoings, and pays to his employees the price of their labour—their wages, finally retaining for himself the balance —his profit.

Wages being the price of labour, the first point to be considered in relation to the various methods of paying this price is the degree of correspondence maintained between the wages received and the labour given in return for these wages. We shall find that, while under the method of time-wage the time occupied in the performance of labour is the primary basis upon which the amount of the wages due to the workman is calculated, without any necessary measurement of the amount of labour performed, in the case of task-wage and of piece-wage an exact proportion between work done and pay received forms the essential basis of the wage-contract. All the same, whatever may be the method adopted, we shall observe that, to a greater or less extent, all forms of the wage-contract are founded upon a common basis,

Chap. I. pp. 9-12

Chap. II. pp. 13-42

Chap. III. pp. 43-47 time, output, exertion, and pay being, with more or less exactness, taken into account in every case. After ex-
Chap. IV. pp. 48, 49 amining the reasons for which in different cases different
Chap. V. pp. 50-55 methods of wage-payment are preferred by employers and by employees, and, in particular, the grounds,
Chap. VI. pp. 56-86 some of them of indisputable validity, others entirely fallacious, upon which the method of piece-wage is, in numerous instances, objected to by working-men, we shall proceed to investigate those systems, under which, with a view to securing and rewarding the display of more than normally intense exertion
Chap. VII. pp. 87-113 and of more than ordinary carefulness, a premium is added to the ordinary wage. In particular, we shall remark with attention certain types of "Progressive Wages," known under the name of "Gain-sharing"—arrangements under which a fixed or *minimum* wage is supplemented by a premium proportionate to the efficiency exhibited by the workman, so far as this exceeds a specified standard. In this manner the employee is assured of a clearly defined *minimum* remuneration, while participating, in addition, in the gain which accrues by reason of the special degree of activity and intelligence displayed in his labour.

So far we have been dealing with the method of industrial remuneration as it affects the relations
Chap. VIII. p. 114 between the employer and the employee working in
Chap. IX. pp.115-126 isolation—"single-handed." The various systems of
Chap. X. pp.127-146 "collective" remuneration (remuneration, that is,
Chap. XI. pp.147-154 paid in respect of the combined labour of a group)—collective task-wage, collective piece-wage, collective
Chap. XII. pp.155-165 progressive wages, contract work and co-operative

work—are distinguished by special characteristics which we shall proceed to investigate.

In relation to the method of industrial remuneration, we must not forget that, while the working-man objects to being underpaid, he no less strongly objects to being over-driven. Thus, in considering the various systems of remuneration, the position occupied by the foremen, overlookers, and other superintendents of labour is a matter requiring earnest attention. Chap. XIII. pp.166-179

A critical examination of the character of those grave industrial evils, the existence of which the labours of one of the most protracted inquiries of modern times disclosed to an indignant nation, will convince us that the true inwardness of "the Sweating System"—so far as the method of remuneration is concerned, so far, that is, as "the Sweating System" is a system at all—is to be looked for in the fact that the "sweated" workpeople, instead of being employed under a foreman remunerated by time-wage, are employed under a task-master remunerated by "the profit on the job," that is, in strict proportion to the speed at which he can drive his subordinates. If it were possible entirely to abolish the piece-work remuneration of all superintendents of labour, then, and then alone, should we have got rid, root and branch, of "the Sweating System." This, however, is a step which, for reasons not far to seek, it is unlikely that employers will, for the present, at any rate, be persuaded to take. Here, again, the "middle way" of progressive wages lies open; the foremen and leading men may be remunerated, mainly by a fixed Chap. XIV. pp.180-204 Chap. XV. pp.205-226

time-wage irrespective of results, but, in part, by a moderate premium on output.

That the position of the working-classes under the existing wage-system leaves much to be desired, will freely be admitted. Prominent among the agencies which have been initiated with the view of improving this position are the two important movements of Trade Unionism and Co-operation. While the aims of these two movements are in a large measure identical, both endeavouring to secure for the workmen the power of exercising control over the organization of industry, and of regulating in their interests the division of the wealth in the creation of which their industry takes part, the means adopted exhibit a wide divergence. For while Trade Unionism takes the wage-system as it finds it, and tries to make the best of it, Co-operation proposes to substi-
Chap. XVI. pp.227-238
tute, wholly or partially, for the wage-system certain novel methods of organization and remuneration. Under these circumstances, it will be seen that Trade Unionism stands outside the scope of our present subject—the method of remuneration. Co-operation, on the other hand, must be examined with attention.

Chap. XVII. pp.239-248
Chap. XVIII. pp.249-253
Chap. XIX. pp.254-259
Co-operation exists in two distinct forms—Profit-sharing and Industrial Co-operation. Under the method of Profit-sharing (which must be distinguished from the various systems of progressive wages and from the primitive practice of Product-sharing) the workmen are to be induced to display a special degree of efficiency by the promise of an addition to their ordinary wages, taking the shape of a bonus con-

tingent upon the rate of profit realised by their employer.

While an examination of the facts in respect to those British firms, which have adopted Profit-sharing, will show us that this system has been tried in a considerable number of instances, and appears in not a few cases to have met with a fair amount of success, yet the radical defect of a method of industrial remuneration, under which the reward of the servant's labour is made contingent upon the good or bad management of the business by his employer, and upon the hazards of commercial fortune, renders it difficult to admit, except with a great degree of reserve, the claim of these novel arrangements to have effected a substantial improvement in the ordinary wage-system. At the same time, we shall see that there are many cases in which, if the extra efficiency exhibited by the employees is not measured by the profits of the business, their special zeal cannot be measured at all; here the method of Profit-sharing possesses marked advantages, and may, it is submitted, prove well adapted to promote the interests alike of employer and employee.

Chap. xx. pp.260-285
Appendix A. pp. 366-379
Appendix B. pp. 380-404
Chap. xxi. pp.286-309

In regard to Industrial Co-operation, the aim of which is to get rid altogether of the capitalist *entrepreneur*, and to organize industry upon a system under which workmen shall be their own masters, providing the whole of the capital, taking into their own hands the entire management of the business, and dividing between themselves all the profits, we shall observe that this ideal has, in practice, been

Chap. xxii. pp.310-318
Chap. xxiii. pp.319-351

found incapable of realisation. The greater part of our Industrial Co-operation is carried on upon lines which altogether exclude the employees from all participation in profits, while the share in the management of the co-operative businesses, which their employees possess, is, as a rule, insignificant. What the Co-operative Movement has done is, in the main, not to make it possible for workmen to be their own employers, but to enable a large number of working-men to become the employers of a small number of working-men. There are, however, as we shall see, a certain number of co-operative associations in whose organization some approach is made to the original ideal of Industrial Co-operation, the employees of these societies possessing a more or less considerable share in the management, and being allowed to share in the profits. The undertakings carried on under these conditions will be admitted to present features, which confer upon them a high degree of interest, and which entitle them to the sympathetic consideration of all students of social questions.

Appendix c. pp. 405-419

Chap. XXIV. pp. 352-365

CHAPTER I.

THE DIFFERENT KINDS OF WAGES.

Subject to certain important qualifications, the nature of which will be explained in the succeeding chapter, the various types of wages-remuneration may be defined in the following manner.*

The two leading forms of Industrial Remuneration under the wage-system are time-wages and piece-wages. Intermediate between these principal forms stands that known as task-wage; while supplemental to these two main methods we find those various systems which will here be designated by the name of progressive wages.

* For the sake of clearness it may be convenient to illustrate by (imaginary) examples the different kinds of wages defined in the text. If a compositor is engaged by a master printer at 8*d* per hour, this workman is employed on *time-wage*. If the contract between the compositor and his employer be that this workman shall receive payment for whatever work he shall perform at the rate of 8*d* for every 1,000 "ens" of, say, brevier type set up by him (the en, *i.e.*, the letter n, being the customary unit in calculating the wages of

The employee engaged on time-wage sells to his employer the labour which he shall perform within a given period, irrespective of the amount of labour performed within that period.

The employee engaged on piece-wage sells to his employer a specified amount of labour, irrespective of the time occupied by the performance of that labour.

The employee engaged on task-wage sells to his employer the labour which he shall perform within a given period, with an express agreement on the part of the workman to perform within that period not less than a specified *minimum* amount of labour.

Under the method of progressive wages the employee receives a promise that, if his labour shall exhibit a specified degree of efficiency, he shall obtain,

compositors, because the width of that letter is the average width of all the letters of the alphabet), he is employed on *piece-wage*. If the contract were to be that the compositor shall be paid at the rate of 8*d* per hour, but subject to his setting up in every hour at least 1,000 ens of brevier type, and with the agreement that, if he sets up in one hour 750 ens only, then the employer shall have the right to pay him 6*d* only for that hour, and that, if he should set up 1,250 ens in an hour, the employer is not to be bound to pay him for that hour more than 8*d*, this man would be employed on *task-wage*. If the contract were to be that the compositor shall receive 8*d* an hour with, in addition, a premium of 1*d* for every 100 ens in excess of 1,000 ens of brevier type which he shall set up in the hour, this workman would be employed under the method here termed *progressive wages*. If the employer were to make a bargain with a group of ten compositors that they should receive between them 6*s* 8*d* for every hour worked by the group, but subject to their setting up in the hour not less than 10,000 ens of brevier type, and with the agreement that, if they set up in one hour no more than 7,500 ens, their pay for that hour shall be 5*s* only, while, if they should set up in an hour 12,500 ens, then

in addition to his fixed time-wage or piece-wage, a further remuneration, here called a premium.

One matter of importance in relation to wages is the distinction between wages paid to a single workman, in respect of his individual labour alone, and wages paid as the collective remuneration of the combined labour of a group of workmen.

The lump sum paid in respect of the aggregate labour of the group may be apportioned among its members by their employer by allotting to each a specified share in this aggregate amount; this will here be termed "collective task-wage," or "collective piece-wage," or "collective progressive wages," as the case may be.

Or this lump sum may be apportioned by the

their employer shall be under no obligation to pay to the group for that hour more than the stipulated 6*s* 8*d*, these compositors would be working under the method of *collective task-wage*. If the group of ten compositors were employed under an agreement that they should receive between them (say, in equal shares) 6*s* 8*d* for every 10,000 ens of brevier set up by them, these men would be working under the method of *collective piece-wage*. If the master printer were to agree with the group that their remuneration should consist of a fixed wage of 6*s* 8*d* for every hour worked, divisible between them, say, in equal shares, with, in addition, a premium, similarly divisible, of 10*d* for every 1,000 ens of brevier set up by the group in an hour in excess of 10,000 ens, then these compositors would be employed under the method of *collective progressive wages*. If the arrangement under which the work is done were to be that one of these ten compositors shall take the work at a contract price of 6*s* 8*d* for every 10,000 ens of brevier type set up by the group, the wages of the nine subordinate members of the group, at the rate of 8*d* per man for each hour worked being deducted from this price, and the leading man (contractor) receiving, as his remuneration, the

employer between the group by, first, deducting the time-wages of the subordinate members, and then paying to the principal member or members, out of the balance thus left, a piece-work remuneration, the amount of which varies directly with the rate of speed in working maintained by the group. Work done under this method will here be spoken of as "contract work."

Or this lump sum may be apportioned amongst the members of the group in such proportions as they, at their own discretion, shall determine. Work performed under this method will be referred to as "co-operative work."

balance remaining after the aggregate amount of the wages due to the nine subordinates had been so deducted, then the work done in this case would be said to be done as *contract work*. Lastly, if this group of compositors were to agree with their employer to produce, say, a weekly newspaper at the price of 6*s* 8*d* for every 10,000 ens of brevier type set up, dividing this sum of 6*s* 8*d* amongst themselves in such proportions as should be agreed upon between themselves, this work would be done as *co-operative work*.

CHAPTER II.

THE COMMON BASIS OF ALL KINDS OF WAGES.

The general character of the distinction between the different methods of paying for labour under the wage-system has been explained in the last chapter. Notwithstanding the important points of difference which exist between the various forms of wage-payment, there can be recognised, underlying all these divergent types, a common basis, the nature of which it will be sought to make clear by illustrative facts.

The two leading methods of wage-payment, as we have seen, are time-wage and piece-wage. The employee working on time-wage is paid in proportion to time worked, the piece-worker in proportion to work done. But in the practice of industry, whether a man be employed on time-wage or on piece-wage, both the time occupied and the work done are, as a rule, taken into account. To put it roughly, time-wage very often has a piece-basis, and piece-wage has in practically all cases a time-basis.

First, as to the piece-basis of time-wage. Although under the method of time-wage the remuneration of the employee is fixed without any direct reference to the amount of labour which he shall perform within a given period, yet the performance of not less than, or not more than a given amount of work within a given period of time, forms, in many cases, virtually a part of the contract between the employee working on time-wages and his employer.*

On the one hand, the employer nearly always discharges all operatives who do not work at a certain *minimum* rate of speed; on the other, the operatives always object to working at a rate of speed greater than they think consistent with their reasonable well-being, and, in many trades, fix a certain *maximum* speed, which they, upon one ground or another, decline to exceed.

Concerning the exaction by the employer of a *minimum* rate of speed little need be said. Frequently before an order is undertaken, still more frequently before the execution of an order, or before the fabrication of goods for stock is commenced, a minute calculation of the labour-cost of each necessary process is

* In those cases, in which the exaction of the performance by an operative employed on time-wage of a fixed *minimum* of work within a given period is really rigid, the method of remuneration bears a strong resemblance to task-wage, but is distinguished from that method by this—that, while the employer, who finds that his workman on time-wage does not get through his "tale of bricks" in a given time, can, of course, discharge the man, he has no right to make a deduction from his wages (in proportion to the deficiency of output), as he could do, if the man were employed on task-wage (see *post*, p. 49).

made. For this purpose every foreman is required to supply an estimate of the cost of production, so far as concerns his own department. And, of course, it is the duty of each foreman to see that the total sum paid away in time-wages to the operatives employed under him does not exceed the amount of his estimate. It is, therefore, the business of the foreman to take care that not less than a certain standard amount of work shall be done in return for a given amount of time-wage; in other words, to secure that the operatives shall work at the *minimum* rate of speed, upon which his estimate was based; and, with a view to the maintenance of this rate, he is called upon to designate for dismissal any operative whose work falls short of this standard.*

It is worthy of note that, while the belief that the correspondence between output and pay is invariably much less strictly maintained under time-wage than under piece-wage, is to a great extent responsible for that opposition to piece-work which has hitherto been deemed an essential part of the Socialist programme,† it is now beginning to dawn upon the

* In engineering works a special set of superintendents is sometimes employed to see that the machines are used to the greatest possible advantage, workmen on time-wage being obliged by the supervision of these "speeds and feedsmen" to produce an amount of output which the employers consider proper. Compare the evidence of Captain Noble as to the Elswick Works (Sir William Armstrong and Co.), in *Report of Committee on the Manufacturing Departments of the Army*, 1887, p. 428.

† Compare Marx's *Capital*, translated by Moore and Aveling, stereotyped edition, pp. 564, *et seq.* Among economists with strongly Socialist proclivities, by whom the method of piece-work is objected

minds of some of the most intelligent members of the Social-Democratic party that, so far as this point is concerned, time-wage and piece-wage to a great extent stand very much upon the same footing. Thus, a compositor, writing in *Die Neue Zeit* in support of this view, mentions that, in an office in which he was employed, the compositors were, indeed, on time-wage, but each man was obliged, under pain of dismissal, to produce a fixed amount of work every day; at first, the *quantum* exacted was two sheets of a certain annual publication; after three months the "stint" was put up to two and a half sheets; now it is three sheets a day.*

Among the trades, in which the performance by operatives employed on time-wage of a strictly fixed amount of output is required by employers, may be mentioned the ready-made tailoring trade. In the coat-making workshops of East London "piece-work is rare . . .; but the more driving masters insist on a certain stint of work, and the day, if needful, is lengthened out at the worker's expense in order to accomplish it." † In this trade again, as with the

to as tending to lower the remuneration of labour, may be mentioned Professor Loria (see his *Analisi della Proprietà Capitalista*, Vol. I., pp. 371, *et seq.*); the objections taken by Professor Loria are criticized by Professor Dalla Volta in his book, *Le Forme del Salario*, pp. 103, *et seq.*

* *Piece-work and the Agitation against it*, by W. H. Vliegen, *Die Neue Zeit*, No. 37 (1891-92), p. 337; see also the articles by the well-known Socialist leader, Domela Nieuwenhuis, in Nos. 16 and 36.

† *Life and Labour of the People*, edited by Charles Booth, Vol. I., first edition, chapter on the Tailoring Trade, by Miss Beatrice Potter

compositors above referred to, complaint is made that the "stint" of work required from the workpeople is constantly increased. Thus, we read of a strike of about fifteen thousand coat-makers in New York, employed on time-wage, with the obligation of making a certain number of coats as a day's work; "from time to time the contractors increased the task, until, in many cases, the tailors were obliged to work twelve to fifteen hours, and in some cases two to two and a half days, in order to earn one day's wages." * So, again, in the cloak-making industry, pressers, also employed on time-wage, were stated by a witness who gave evidence in an inquiry held by the New York Board of Mediation and Arbitration to be required by their employer to press twenty-eight garments as a day's work. "Formerly they made fourteen, and then they were raised four garments to eighteen, and finally, he said, twenty-eight garments would satisfy him, and whoever could not make them must work nights and work during the dinner-time." †

Without accepting as absolutely accurate statements

(Mrs. Sidney Webb), pp. 222, 223; compare the remarks of Mr. Burnett, Chief Labour Correspondent of the Board of Trade in his *Report on the Sweating System in East London*, 1887 (p. 6)—"So nicely can the productive ability of his workers be guaged by the sweater, that a certain wage per day means invariably a certain amount of work per day."

* *Report of the New York Board of Mediation and Arbitration for* 1894, p. 261.

† *Ibid.*, p. 147.

such as those just cited, we may yet feel convinced that the idea, that it is only under piece-wage or task-wage that employers are able to maintain a definite ratio between output and pay, is wholly inconsistent with the facts. For it is not only "the more driving masters" who make the performance of a clearly specified *quantum* of labour an express condition of the wage-contract in relation to operatives employed on time-wage. To a greater or less extent the principle, which is involved in nearly every case in which workmen are employed on time-wage, is that which may be illustrated by the answer of a gas manager, who, when asked before the Labour Commission, "What do you pay your wheelers and stokers?" replied, "We pay them 5*s* 5*d* per day of eight-hour shifts *for carbonising* 3 *tons* 2 *cwt. of coal.*" *

In the same way, as between one operative and another, the employer, especially (although by no means exclusively) in cases in which the workmen are not well organized, and are, therefore, unable to insist upon the payment of standard *minimum* rates, will be found to pay different men at different time-wage rates, according to what each man "is worth," *i.e.*, according to the amount of work per

* *Evidence before Labour Commission*, Group C., Vol. III., p. 182. Compare the dispute among skinners mentioned in *Labour Gazette*, August, 1895, p. 253; the employers "required each man to 'flesh' thirteen score hides per day, which the men alleged to be excessive." As to boiler-makers on time-wage, but required to put in a certain number of rivets per day, see *Evidence before Labour Commission*, Group A., Vol. III., p. 73.

hour which he performs.* Indeed, the same man may at different times be paid at different rates, according to the speed at which he may, for the time being, be working. Thus, in an important ship-building yard, the writer has heard of men working "on the nod," as it is called. The particular work on which these men were engaged could not be paid for as piece-work, because its nature did not admit of its being accurately priced; if it could have been priced, they would have been put on "time and a quarter piece-work" (see *post*, p. 87); as it could not, and as they agreed to work as hard as if they had been on piece-wage, and were admitted to be doing about 25 per cent. more work per hour than they would have been expected to do if on ordinary time-wage rates, these workmen received time-wages higher by 25 per cent. than their ordinary rates.†

* Compare, from the point of view of the workman, the story told many years ago of a Manchester smith. "When asked what wages he expected, he produced his hammer, which had a long handle, and three notches on it, and, taking hold of the hammer with the shortest leverage, he said, 'That, sir, is 28*s* a week;' holding the hammer with a longer leverage, he said, 'That, sir, is 30*s* a week;' and then, taking hold of the hammer handle at the end, so as to wield the heaviest blows, he said, 'That, sir, is 32*s* a week.'" (Cited in *Co-operative Production*, by B. Jones, p. 445.)

† For a similar reason workmen have their time-wage rates increased when working under a contractor (see *post*, p. 151); as to the payment by sub-contractors of wages higher than those paid by the principal employer (see *post*, p. 185). The explanation of these higher rates of remuneration is that the workmen working under contractors and sub-contractors are obliged to work harder than they would if not so employed.

Similarly, in regard to the repairing of ships, in which it is always desired to get the work done as quickly as possible, in order to avoid keeping the vessel idle for longer than can be helped, but in which, as is usually the case with repair work (see *post*, p. 45) it is difficult or impossible to price the work and get it done on piece-wage, we find employers paying the workmen an extra high time-wage upon the express condition that they shall work with a special degree of expedition, greater than the normal standard, Thus, in an agreement made in 1894, between the Ship Repairers of the United Kingdom and the Boilermakers' and Iron and Steel Shipbuilders' Society, it is provided that certain special rates of daily wages shall be paid to certain classes of workmen engaged on repair work in the tanks of particular classes of vessels (carrying oil), and "it is agreed by the Boilermakers' Society that, for the rates above mentioned, piece-work speed must be worked,"* that is to say, in effect, the workmen agree, in consideration of receiving these special rates of time-wage,† to do, say 25 per cent. more work per hour than they would have done if receiving their ordinary rates. To put the whole matter shortly; in cases in which men are employed on time-wage the element of output is never

* *Agreements between the Employers' Associations and the Boilermakers' and Iron and Steel Shipbuilders' Society*, 1894, pp. 15, 16.

† The fact of the rates being fixed at an extra high level in this case is partly due to the arduous and disagreeable nature of the work, the promised degree of exertion not being the only factor taken into account.

wholly lost sight of, and in many instances (although by no means as a general rule) the correspondence between the amount of labour performed and the amount of pay received, is in the case of workmen on time-wage in every respect as closely maintained as if these men were working on piece-wage or on task-wage.*

So far we have been considering the quantitative basis underlying time-wage remuneration, as this basis is fixed in the interests of the employers. No less strictly, in many cases, is the correspondence between the amount of time-wages paid for a given number of minutes and the amount of work done within that period maintained by the practice, and in the interests of the operatives. By way of illustration,

* A system always called "time-wage," and which bears at first sight a resemblance to a real time-wage with a piece-basis, but was in fact a kind of piece-wage with a time-basis, at one time existed in the boot trade. The standard current wage being a piece-wage, when a man was engaged on "time-wage," he was obliged to agree that he would perform in return for his weekly wage a specified amount of work. For example, he had 28*s* per week, with the obligation of producing eight dozen and three pairs, or (if on better-class work) got 30*s* per week, being bound to complete six and a half dozen pairs in the week. But the employer was under no obligation to find full work for his men, and, in fact, there was often no work for them to do during a great part of each week. Now, while their time-wage was docked proportionately, if they did less than the specified quantity, at the same time, if the man happened to exceed his specified quantity, he was not paid for the excess at the same rate as for the specified tale of boots, but at a lower rate—often lower by 25 per cent.; if he insisted on being paid for his extra dozen at the same rate as for his specified number, the employer gave him the money—and his discharge.

the following copy of a letter, addressed by a branch secretary of a trade union to an employer, in relation to certain processes incidental to the packing for export of Manchester goods, will be of interest:—

"Sir,—Our terms for hooking or stitching are 6*d* per hour. We hook thirty pieces twenty-four yards prints, or twenty-five pieces thirty yards per hour. We hook one hundred pieces twenty-four yards greys in the set of three hookers. We stitch seventy-five prints one each end per hour, and one hundred greys one each end per hour.

"On behalf of No. 3,

"General Warehousemen's Society."

It will be understood that if, in a case like this, a workman finds at the end of three quarters of an hour that he has hooked the specified *maximum* (say, thirty pieces twenty-four yards prints), then he is entitled, and is, by agreement with his fellow-workmen, bound to stand with his arms folded during the remaining fifteen minutes.

As another example of the manner in which, when men are employed on time-wages, the relation between time and output is expressly fixed by rules made by the workmen and forming, virtually or explicitly, part of their contract with their employers, may be cited the instance of the Associated Shipwrights' Society, whose members work on time-wage, but with an express agreement as to the quantity of work of each kind which is to be done per day. Thus, at Hull the rules of the trade union provide that "a day's work in metalling [putting copper sheathing on a ship's bottom] shall in no case exceed twenty-five sheets on hard wood strips, and twenty-eight on

soft wood strips. . . . Nine and a half hours to constitute a day's work for five days, Monday to Friday, Saturday five and a half hours;" but "in no case shall men, when working overtime, do the same amount of work for a quarter, half, or day's work at overtime, as they do in their ordinary day's work." Similar provisions are made in respect to caulking, the specified quantity of work varying according as the ship is new or old, and being again different in the case of hard wood and of soft wood. The reduction to be made in the output when men are working overtime is also exactly specified, *e.g.*, in "caulking over the side" the trade union *quantum* is "cut out and horse up, and put in one or two threads—eighty feet per day;" but in overtime "at the rate of sixty feet to be a day."

Another example of trade union action fixing, in regard to the remuneration of men working on time-wage, the *quantum* of work to be performed within a given period will be found in the official *Report on the Strikes and Lock-outs of* 1889 (p. 140), where an account is given of the demands, finally acceded to by their masters, which were made by the Glasgow plasterers. These workmen, who complained that the employers had been compelling them to exhibit an unreasonable and improper intensity of exertion, obtained the adoption of "a working card, in which was set forth the time that should be taken to properly begin and finish certain kinds of plaster work. This list allowed of no resting or lazying, but was in every sense of the word a good substantial

day's work, that could be done only by good and efficiently trained journeymen."

In the cases just referred to we have instances in which the piece-basis of time-wage is laid down by express agreements between employer and employed; but, quite apart from any specific bargaining of this character, it may be taken as a general rule that, just as the employer, who pays a time-wage, expects to get for his money a "fair" amount of work, so the workman, who is employed on time-wage, objects to give in return for his day's wages more than "a fair day's work."

We will now pass from the piece-basis of time-wages to the time-basis of piece-wages. Under the method of piece-wage the remuneration of the employee is fixed in exact proportion to the amount of his output, without any direct reference to the period of time within which that output is produced. None the less, in every contract for the performance of work on piece-wage the question of the time, in which a given amount of output will be produced, is never left out of consideration. When an employer proposes to a workman that he shall get so much money for making so many articles, and when the employee consents to an agreement of this nature, the basis alike of the proposal and of the acceptance is the expectation that, working with this piece-rate, the workman will be able to earn so much per hour, per day, or per week.*

* Compare the agreement between employers and employed in the boot trade, settling the general principles on which piece-work

In engineering workshops, for example, it is the common practice to fix piece-work rates with a specific reference to time, the men being rated at so much per hour (even though they may never be employed on time-wage), and their piece-wage remuneration being said to be on a "time and a quarter," a "time and a third," or a "time and a half" basis, as the case may be. That is to say, the piece-work prices are fixed at such a level, that the workman, working, of course, with an intensity greater than he would be expected to display if employed on time-wage, may be able to earn in every hour a sum exceeding his rated time-wage by one-fourth, one-third, or one-half.* But in all cases of piece-work, whether there be, as is usual in the engineering, shipbuilding and other trades, a specific reference to the relation between the piece-wage rates and a fixed scale of time-wage rates or not, all forms of piece-wage remuneration have underlying them a time-basis; the agreement, that is to

"statements" (lists of piece-wage prices) for machine workers are to be determined, dated November 4th, 1895, clause 3—"That when the capacity of an average workman is arrived at, the average present wage [time-wages] on each operation in each district shall be ascertained, and piece-work prices based upon such average wage" (*Labour Gazette*, November, 1894, p. 337).

* "A piece-work price is placed on each article produced, or on each operation through which the article passes in process of manufacture. These prices are so calculated (though there is no inflexible rule on he subject) that an average workman may be able to earn about one-third more than his daily rating" (*Report of Committee appointed to inquire into the Organization and Administration of the Manufacturing Departments of the Army*, 1887, p. ix).

say, is that the piece-worker, getting so much for each unit of output produced by him, shall be able to earn so much money in a definite time.

With respect to the time-basis which lies at the root of piece-work prices, it is to be observed that in some cases the agreements between piece-workers and their employers make specific reference to a time-basis which is confessedly fictitious. That is to say, while the real time-basis in these, as in all other cases, is the amount of money which a man working with these piece-rates will be able to earn in a given period of time, say in a day, the wage-contract is ostensibly based upon a "day's work," which is not in reality the amount of work which the workman can perform in the number of hours comprised in the working day. Thus, in the ("bespoke") tailoring trade, the standard rate of remuneration is a piece-wage rate with an expressed time-basis, so many hours at so much an hour being allowed for making each class of garment, irrespective of the time actually taken. But, as a fact, the hours allowed are longer than those required for the completion of each article by a workman of average ability. For example, we find in the Board of Trade *Report on the Strikes and Lock-outs of* 1895 (p. 269) a case in which twenty-two hours are allowed for the making of a garment, the production of which, according to the statement of the employers, takes in reality twelve hours. Indeed, a journeyman tailor remarked to the writer that "a good man can practically get as many hours as he likes."

An interesting example of a piece-wage rate expressly fixed on a time-basis, which is admitted to be fictitious, is to be found in the flint-glass trade. Here the time allowed for doing a specified amount of work is far greater than that which is actually spent in the performance of this work by an operative of average ability. Thus, I saw a man making thermometer tubes, nominally at 6*d* per hour with a contractual obligation to make 60 tubes per hour. As a fact, a workman of average capacity can easily make 120 tubes and earn 1*s* per hour; and this sum was the standard *minimum* wage current in the trade. In the case cited the workman had made 146 tubes in his last hour, and, being paid in exact proportion to the amount of his output, was earning at least 1*s* 2*d* to 1*s* 3*d* per hour.* A similar system of piece-wage payment with a specified "day's work," which is also considerably lower than the quantity of output which workmen of average capacity can

* It is possible that the original wage of these flint-glass operatives having been, say, 6*d* per hour, an increase of remuneration was obtained, not by increasing this rate of pay, but by a gradual diminution in the *quantum* of labour which the employer was entitled to exact as the result of an hour's work—a supposition which tallies with the fact that, when employers and employees in this trade are at variance in regard to the remuneration of the workmen, the discussion takes the form of a dispute, not as to how much per hour shall be paid, but as to "numbers," *i.e.*, as to the number of articles that must be made in one hour in order to entitle the operative to the *minimum* (nominal) rate of pay per hour; see *Principles of Glass-making*, by Harry J. Powell, p. 77, and compare *Report on the Strikes and Lock-outs of* 1893, p. 204.

and do produce in a day, obtains in the glass-bottle trade.*

Another trade, in which we find instances of piece-wages with a fictitious time-basis, is the pottery industry. Thus, in a statement by the secretary of a stoneware company in Minnesota, quoted by Mr. Schoenhof (*Economy of High Wages*, p. 191), it is said that the "men are paid by the 'day,' that is, the 'potter's day,' which consists of a fixed number of gallons of a certain kind or size of ware. The average potter will do five 'potter's days'' work in one calendar day, and he can do six if an expert and not limited in quantity." So, again, as to the remuneration of the London farriers; the wages of these workmen are spoken of as so much per "day," the "day" being, not a number of hours, but a *nominal* day's work—a specified number of cart shoes or of coach shoes put on. During the labour dispute, which took place in this trade in 1897, it was asserted by the Executive Council of the Veterinary Surgeons' and Master Farriers' Protection Society, that "a man may make two or even two and a quarter days in ten hours;" and that "inspection of the books of a well-known employer shows that average men make nine and a half days per week."† Other examples of a

* See *Evidence before Labour Commission*, Group C., Vol. III., pp. 376, 628, and 629, and *Report on Wages and Hours of Labour* of 1894, Part II., pp. 210-220.

† *The Times*, May 13th, 1897; see also *The Daily Chronicle*, May 20th, 1897; compare *Report on the Strikes and Lock-outs of* 1893, pp. 77, 196.

piece-wage with a fictitious time-basis may be found in the mining industry. Thus, in Staffordshire the miner's remuneration is a piece-wage so fixed as to enable a man doing a certain "stint" of work (a "holer's day")* at so much per ton to earn a certain sum in a (nominal) day. "In one seam, for example, a length of 7 ft. cut under the seam for a depth of 5 ft." is a "holer's day."† The Chairman of the South Staffordshire and East Worcestershire Coal Masters' Association informed the Labour Commission that the actual daily output of a hewer exceeds his nominal day's work ("stint"), and his actual daily earnings exceed the nominal day's wage by from 25 to 75 per cent.‡ In the Lanarkshire mines the piece-wage per ton is in the same way based upon a standard of output called the "darg" (a Scotch word signifying a day's work) yielding a specified sum per "day;" "but the miners may put out more than the standard darg, and in that way their wages are higher than the nominal wages. For instance, the nominal wage is stated at present to be 6*s* a day, but we know from figures we have got, and they are admitted by the miners themselves, that the average wages earned by the miners at present may be taken at 7*s* a day. . . . Suppose the darg is three

* The terms "holer's day" and "stint" appear to be used to signify either the amount of the work to be done for a certain sum or the sum to be received for doing a certain amount of work.

† *Digest of Evidence before Labour Commission*, Group A., Vol. I., p. 80.

‡ *Evidence before Labour Commission*, Group A., Vol. II., p. 99.

tons, as it is in many collieries, the nominal rate would be 2*s* a ton. He may put out 3 tons 10 cwt., and in that way his wage is higher than the nominal or standard wage" (*Evidence* of Mr. R. Baird, Secretary of the Lanarkshire Coal Masters' Association).* In Ayrshire, according to the evidence of Mr. J. Keir Hardie, the standard "darg" wage was 5*s* 3*d* per day, but the actual earnings averaged about 6*s* per day.†

Whether, in the cases in which, in regard to the remuneration of men on piece-work, the specified daily or hourly output, on which the rates of piece-wage are based, is a real or a fictitious basis, whether, that is, this output is the amount of work which an average workman is able to perform in a day or an hour, as the case may be, or some other amount, does not affect the point to which attention is now directed —the fact that, while the piece-worker's remuneration is so much money for so much work, the piece-wage rates are fixed with a specific reference to the time occupied in the production of the output. So important

* *Evidence before Labour Commission*, Group A., Vol. II., p. 233.

† *Ibid.*, p. 215. The term used in Ayrshire is "master's darg," the original meaning of the term having apparently been the stint of work which a master could require to be done, as a *minimum*, in a working day. It is possible to surmise that the existence of a fictitious "day's work," as the basis of the wage-scale in a piece-work trade, points to a change in the method of remuneration, the original method having been time-wage with a piece-basis in the form of a *minimum* output per day exacted by the employer, and this method having subsequently given place to piece-wage, while the old basis is still in name preserved.

a part, indeed, does the time-basis play in piece-work methods of remuneration, that it is sometimes a little difficult to see at a glance whether the system under which a man is working is time-wage with a piece-basis, or piece-wage with a time-basis. Take, for example, the case of the rivetters employed by a firm of marine engine builders on the Wear, mentioned in the *Report on Wages and Hours of Labour* published in 1894 by the Labour Department of the Board of Trade (Part II., pp. 138-140). Here, "assuming that the recognised time-rate for rivetters is 8*d* per hour, the price paid for nine rivets, as per the first two items of the following section of the list, would be 8*d* for each rivetter in a set :—

Rivetting circumferential seams in shell, 1-in. rivets	9	rivets per hour.
Rivetting circumferential seams in shell, $1\frac{1}{16}$-in. rivets	9	,, ,,
Rivetting circumferential seams in shell, $1\frac{1}{8}$-in. rivets	8	,, ,,
Rivetting circumferential seams in shell, $1\frac{1}{4}$-in. rivets	7	,, ,,
&c., &c.		&c., &c."

At first sight, this method of wage-payment looks like that in force in regard to shipwrights mentioned above (pp. 22, 23) ; *e.g.*, as to "caulking over the side," "cut out and horse up, and put in one or two threads —80 ft. per day." But the difference is that, if the shipwrights should on any day exceed the specified amount of caulking, they could not claim payment for the excess ; for, since these workmen are on time-wage, their employer has a right to receive, in

exchange for a day's pay, all the output that may be produced in the day. On the other hand, if the rivetters, to whose remuneration the scale of wages just set forth applies, were to put in twelve rivets in an hour, they would be entitled to receive pay as for one hour and one-third; in other words, the rivetters are paid in exact proportion to the amount of their output, which shows that the method under which they are employed is that of piece-wage. Thus, "the recognised time-rate for rivetters of $8d$ per hour," merely denotes the time-basis of their payment; their real remuneration is a piece-work rate—$\frac{8}{9}d$ per rivet (on 1 in. and $1\frac{1}{16}$ in. work).

One of the best examples of piece-wage remuneration with a clearly defined time-basis is to be found in the coal-mining industry carried on in Northumberland and Durham. The piece-wage per ton of coal hewn varies greatly according to the nature of the different seams, but is in each and every case so fixed that, whether a man is getting $1s$ per ton or $2s$ per ton, his daily earnings, supposing him to be of average efficiency, shall amount to an agreed sum (*e.g.*, in Durham $5s$ $5d$ per day) * which is called "the county average." Within certain limits a mine-owner, so long as the average earnings of all his men do not fall materially below the county average, is allowed

* Both as to the coal trade and the cotton trade the figures represent the wages paid at the time when the writer was investigating the facts; since they are given by way of illustration only, it has not seemed necessary to take account of any subsequent changes in rates.

to pay the men in different parts of his mine, some a little above, others a little below the county average; but if the men working in a particular "flat" find that their piece-wage is so low that they are earning much (say 15 per cent.) less than 5*s* 5*d* per day, then they apply to the Joint Committee (composed of representatives of the employers and the employed) to have the matter put right. The method adopted, in settling what is the proper piece-wage, is to allow a high tonnage rate where the coal is hard to work, a lower rate where the men are working in easy places. If a "hitch" occurs, then until the seam is again found to be in a "fair" (normal) condition, the miner will either be put on time-wage (this wage being based on his previous actual average earnings as shown by the pay-sheets of the last two pay-days), or will get an extra price per ton so calculated as to bring his daily earnings up to their normal level.

Another instance of an express and accurately adjusted time-wage basis in a piece-work trade is to be found in the cotton-spinning industry. The system of remuneration adopted in the cotton-spinning trade is of a highly complicated nature, and cannot be fully described in this place.* The piece-wage at Oldham, for example, is a certain sum for every thousand hanks (each of 840 yards) spun. This piece-wage varies very greatly (according to the number of

* For a full account of this system see the Report on the subject in *Transactions of the British Association*, 1887, pp. 310-313, and the Labour Department *Report on Wages and Hours of Labour of* 1894, Part II., pp. 1-11.

spindles on the mule, the speed at which the spindles revolve, and at which the draws* are made, the length of the "draws," and the number of turns or "twist" given to the thread in spinning); but in every case the piece-wage is so fixed as to enable an operative, working during an agreed number of hours in a week, to earn in that time a certain agreed sum.

In some places (*e.g.*, in some of the Bolton mills) the operatives are paid a piece-wage (with a time-basis) similar to that in force at Oldham, but reckoned, not per thousand hanks, but per hundred draws. Thus, the wage-scale fixed for one mill defined the standard weekly earnings† to be for "mules of 930 spindles each, £3. 0*s* 6*d*," with an allowance of $2\frac{1}{4}d$ per set for time lost in doffing.‡ The piece-wage in this case (the spinners being, of course, employed on piece-wages) varied from 2·81*d* per 100 draws (of 65 inches each), which was the rate payable when the mules were running the draw in 15 seconds, to 4·69*d* per 100 draws—the rate payable when the mules were working at so low a speed that each outward and return movement of the mule-head occupied 25 seconds. But, whether the operative was "minding" fast-speeded mules with a low piece-wage, or slow-speeded mules with a high piece-wage, the piece-wage rate

* The "draw" is the outward and return movement of the self-actor, each movement spinning a length of yarn corresponding with the number of inches passed over by the mule-head.

† The joint earnings of the spinner and the assistants whom he employs. Each spinner works a pair (or set) of mules.

‡ "Doffing" is taking the cops of spun cotton off the spindles.

was so fixed that he should, in all cases alike, be able to make the specified standard earnings in a "factory week" (*i.e.*, "56½ hours, less 1½ hours for cleaning, and 1 hour 20 minutes for breakages").*

The elaborate arrangements as to wages in force in the cotton trade are remarkable for the perfect manner in which, in the agreements between the employers and the employed, full recognition is given to each of those three important factors which lie at the root of the wage-contract under all the different methods of industrial remuneration—time, output, and pay. But in addition to these three factors, there is another element about which a few words must be said. When a workman is offered a given rate of wages, whether time-wages or piece-wages, he has, in order to judge whether he can prudently accept this offer, to consider not only how much he can, working at the wages offered, earn in a week, but also how hard he will have to work, in order to earn this money. He may be quite willing to work for earnings of 6*s* a day, but not if he has to "do seven shillings' worth of work" (that is, to exhibit an intensity of exertion greater by one-sixth than the normal standard), in order to earn this 6*s*. If we wish for an illustration of the maintenance of an explicitly defined standard

* See *Twelfth Annual Report* (1891) *of the Operative Cotton Spinners' Provincial Association, Bolton and District*, pp. 74-76. The speeds mentioned are the *standard* speeds; and it is provided that "if a quicker speed than the standard be required, then a fresh basis and consequent calculation of prices shall be made and agreed upon between the two Associations" (of the employers and the employed).

of exertion, we shall find this in the coke industry. Like the miners, the Durham cokemen work under a piece-wage system with a time-basis in the form of a county average. For some time past these cokemen had complained that their piece-wage per ton was in many cases too low, not because it did not yield the agreed standard daily earnings—very often the men's earnings were admittedly above the county average—but because, in order to earn what they did earn, the men had to handle a greater number of tons than they considered "fair;" that is to say, they alleged that they had to exhibit an intensity of exertion greater than was contemplated in their wage-contract. Accordingly, the whole matter was, in 1891, referred to Dr. Spence Watson, who, after taking a large amount of evidence, made an award in which he established an explicit standard of exertion, deciding that the remuneration of "fillers" (who put the coke into trucks), for example, was to be such as to enable a workman *handling* 20 *tons of coke in the day*, at a basis price of $2\frac{1}{2}d$ per ton, to make standard daily earnings of 4*s* 2*d* per day.*

The manner, in which the element of exertion habitually enters into the wage-contract, may further

* See also the Agreement in this trade of March 10th, 1896 (*Labour Gazette*, May, 1896, p. 146). Compare the evidence of Mr. Lawlor, representing the Bakers' Society of Dublin, before the Labour Commission, in which he mentions a strike which took place in 1889, and which resulted in the bakers' remuneration (piece-wages) being fixed on the basis that the men should not have to produce more than at the rate of 320 two-lb. loaves per man per shift (*Evidence*, Group C., Vol. III., p. 327).

be illustrated by the familiar instance of overtime pay, the extra strain incidental to the prolongation of the normal hours of working* being, at any rate in most well-organized trades in this country,† taken into account, in fixing the remuneration of labour, with the result that the pay for work done in overtime is higher—often materially higher—than that given for the labour of the normal hours.‡

Closely connected with the point which is now under consideration—the importance of exertion as a factor in the basis of industrial remuneration—are

* The fact, that operatives working overtime claim to be paid for this work at a rate higher than their normal pay, is not entirely due to the extra exertion which overtime involves; to a great extent the demand for overtime rates is based upon the desire to discourage the practice of working overtime.

† In France the proportion of the total number of establishments investigated by the Office du Travail in 1891-93, and stating that they worked overtime, in which extra pay was given for overtime work, was 18 per cent. in Paris and its environs, and 23 per cent. in the rest of France (see *Salaires et Durée du Travail dans l'Industrie Française*, Vol. I., p. 481; Vol. IV., p. 128).

‡ A workman employed on time-wage will receive for each hour worked in excess of the normal hours a time-wage higher by a specified amount than his usual hourly pay. With respect to workmen on piece-wage, when they receive extra pay for overtime work, a variety of methods obtain. The workman may get a specially high rate of piece-wage for the particular articles which he produces in overtime (if the output of overtime can be "ear-marked" in this manner); or he may get a higher piece-price than the ordinary rate for the whole of a job, part of which is done in normal hours, part in overtime; or he may receive, in respect of his overtime work, the ordinary piece-price of his output, together with, in addition to that price, extra pay, in the form of time-wages, for every hour of overtime which he may work.

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those not infrequent disputes which arise when the workmen complain that they are being required to "work short-handed." The men, in these cases, admit that a gang, *e.g.*, of dockers, can make an adequate amount of money; but, because the gang is too small—six men being put to do the work of seven or eight men—each has to put forth, in return for his day's pay, an abnormal, and, as they allege, an unreasonable amount of exertion.*

With a view to meet difficulties of this character, we find that the number of men, by whom specific classes of work shall be performed, is sometimes expressly specified in the rules of trade union organizations and in agreements made between employers and employed. Of this nature is the clause in the *Practical Bye-Laws* of the Quebec Ship Labourers' Benevolent Society, which states the *minimum* number of men of whom a gang shall be composed

* The objection to "working short-handed" is, in some cases, in part attributable to the "theory of the Lump of Labour," referred to later on (pp. 80-86), according to which it is considered a wrong thing for "one man to do the work of two." Thus, in a manifesto issued by Mr. Ben Tillett, general secretary of the Dock, Wharf, Riverside, and General Labourers' Union, we find it stated that, "The employers have adopted the most insidious form of reduction, viz., diminishing the number of men in gangs, slave-driving, killing those at work by non-observance of the conditions for working they agreed to, and wholesale reductions in wages. Every gang reduced from ten to six men means the 'stones' and starvation for four of your mates, every two men doing the work of three men means a corresponding addition to the ranks of the unemployed. Every 'cent' thus squeezed out of the wages by the employers is a robbery of the workers" (*Times*, August 29th, 1896).

under different circumstances (*e.g.*, "Single-ported vessels shall employ no less than nine winders, five holders, one swinger, and one stager"),* and the arbitrator's award as to the number of bushellers of which a gang shall be made up in unloading a certain class of corn, mentioned in the Labour Department *Report on the Strikes and Lock-outs of* 1894, p. 170.†

It may possibly be suggested that, in cases such as those just referred to, the matter in dispute is a mere question of the relation between pay and output—exertion not coming in as a separate factor. Obviously, if men are ordered to work six in a gang, the gang being expected to move 6 tons per hour, at a wage of 6*d* (per man) per hour, then if they insist that, while their wages shall remain as before, an additional man shall be employed in the gang, this is equivalent to a demand that the joint output per hour required from these six men in return for their joint remuneration of 3*s* shall, in future, be only $5\frac{1}{7}$ tons instead of 6 tons, while the employer maintains that 3*s* is an adequate price for the amount of work in question—the moving of 6 tons, and objects to getting a smaller amount of work for this money. While, however, admitting that exertion may be expressed in terms of output, it will be well to note that, when, in discussing the subject of industrial remuneration, we have to deal with the relation between output and pay, output must always be considered not alone quantitatively

* *Report of Commission on the relations of Labour and Capital in Canada* (1889), pp. 128, 129.

† See also *Report on the Strikes and Lock-outs of* 1893, p. 108.

(*i.e.*, with reference merely to its amount) but also qualitatively (*i.e.*, with reference to the exertion involved in its production). For what the workman gives, in exchange for his wages, is, primarily, the performance of a given amount of labour, that is, the putting forth of a certain amount of exertion. Incidentally, the workman also contracts to produce a certain output; for the performance of labour usually* results in the production of output. But how much output can be bought from the workman in return for a given amount of wages will, to a great extent in nearly all cases, depend upon how much output can be produced by the putting forth of a certain more or less specifically defined amount of exertion. This, of course, is why the hewing of a ton of coal may cost the employer perhaps twice as much, if the coal is abnormally hard to win, as he pays, if the coal is specially easy to work. The hewer, that is, is paid a higher price per ton when working in the hard place, because, if he were not, it would be necessary for him, in order to earn the normal weekly earnings (the county average), to work with a great deal more than the degree of intensity contemplated in the wage-contract. Accordingly, in reckoning the wage due to the miner, one ton of coal, won in a hard place, may be said to count as a ton and a half, or as two tons; his output, in short, is reckoned qualitatively (*i.e.*, with reference to the exertion

* If you were to set a man to draw water in a sieve, he would expect to be paid for his labour, though the output produced would be *nil*.

involved) as well as quantitatively (*i.e.*, with reference to the weight of coal hewn).

To revert to the cotton-spinning industry, let us take the case of the operative who is "minding" mules the number of the spindles on which has just been increased, so that the number of hanks spun in a "factory week" is augmented, and let us observe the effect upon his rate of pay which ensues by reason of this change in the machinery. His remuneration, as will be remembered, is a piece-price—a certain sum per thousand hanks spun, so fixed as to yield him a certain agreed sum per week. If the basis of the wage-contract were the relation between time, pay, and output, apart from the exertion involved in producing the output, the employers could properly claim that the man's piece-price should be reduced in exact proportion to the improved efficiency of the machinery, accompanied as this is by an augmentation in the rate of output; for under such an arrangement the new, reduced piece-rate would still yield the same rate of weekly earnings as the operative has hitherto been receiving. But what happens is, that the operative, under the agreement between the employers and the employed in this trade, while he cannot object to a certain reduction being, under the circumstances supposed, made in his piece-rate per thousand hanks, yet has the right to object to this reduction being fully proportionate to the increased efficiency of the machinery. The mule-minder is, under this agreement, entitled to have the new piece-rate so fixed as to yield him now, not his old weekly earnings, but a larger sum. For

"the operative at the larger machine, *having thus more responsibility and more arduous work*, is entitled to a higher remuneration."* Accordingly, the new piece-rate is so arranged, "that it is said that the advantage of the improved machine is equally shared by the employer and the operative."†

The details, which have been stated in the present chapter, tend to show that the different methods of paying for labour under the wage-system have, underlying their different characteristics, a common foundation, the several factors of time, output, exertion, and pay, being, in a more or less well-defined manner, present in the basis of the wage-contract in all its forms.‡ Having, then, examined, sufficiently for our purpose, the features virtually common to all systems of wage-payment, we will, in the chapters which follow, proceed to investigate the points in which these various methods of remuneration differ, the one from the other.

* *Report on Wages and Hours of Labour of* 1894, Part II., p. 2. In a list printed in this *Report* (pp. 3, 4), the weekly earnings for the spinner and his assistants vary from £1. 17*s* per week, when the mules have 36 dozen spindles, to £3. 15*s* 4*d*, when the mules have 116 dozen spindles.

† *Ibid.*, p. 3.

‡ It will be understood that, in specifying certain factors as usually present in the basis of the wage-contract in its various forms, no attempt has been made to present an enumeration making any pretence whatever to be an exhaustive list of all the elements which are taken into account in fixing wages—a task involving, of necessity, the consideration of questions concerning the *amount* of wages, which are altogether beyond the purview of this book.

CHAPTER III.

TIME-WAGE.

"Taken as a whole," we are told in the Labour Department *Report on Wages and Hours of Labour of* 1894, Part III. (p. vi), "the system of time-work appears to be the most extensive method of wage-payment in the United Kingdom."*

There are many kinds of work in which the nature of the work causes the method of time-wage to be preferred to any other. This is very often the case

* In the industrial establishments, including those carried on by the Government or other public authorities but excluding railways, tramways, and omnibuses, investigated by the French Office du Travail in 1891-93 it was found that 70 per cent. of the employees (including about 3 per cent. who were foremen or forewomen, or apprentices, children, &c.) were on time-wage and 30 per cent. on piece-wage. Among railway servants some of the workmen in the workshops were on piece-wage; all other railway employees were on time-wages. (See *Salaires et Durée du Travail dans l'Industrie Française*, Vol. I., p. 514, Vol. III., p. 543, and Vol. IV., p. 200). This inquiry did not extend to agricultural labour, seamen, fishermen, or domestic servants.

where scrupulous perfection of workmanship is of much greater importance than speed in working. Especially is time-wage work preferred where the quality of the workmanship cannot easily be tested by inspection.* In all these cases it is, in any event, necessary to select workmen of approved trustworthiness; and it is very frequently found best to rely upon their honesty and upon the efficient supervision of their work by the foremen, rather than upon the stimulus afforded by piece-work or any other form of payment in proportion to the amount of output produced, to secure the performance of their work at a reasonably high speed.

* One case, in which we find time-wage adopted in preference to any form of piece-wage, is that in which a number of successive operations have to be performed, and the quality of the work done cannot be decided until the whole of these operations have been completed. Thus, in explaining the reasons for his conviction that the workmen under his superintendence could not, with advantage, be paid by the piece, the manager of one of the departments of a shipbuilding firm doing work of an exceptionally high class, writes:—"You are, of course, aware that our work is of a special character, and it rarely happens that any one man commences a job and finishes it right out. For instance, the steel plates, which are delivered here from the mills in every stage of crookedness, pass through the hands of eight different sets of men before they are finished and erected in position. With each of these plates, were the work done by the piece, there would be a tendency on the part of the workmen to subordinate quality to quantity, with the result that it would be impossible to apportion the blame for bad work to any one individual. A. would cast the blame on to B., and he in turn would put it on to C., and so on; so that we should need a court of arbitration constantly sitting to settle the differences; whereas, in the system we adopt, there is no reason why each man should not do fully and well his own portion of the work."

Persons in charge of specially valuable and delicate machinery are often put on time-wage, in order to prevent them from handling roughly or overtasking the machinery in their effort to obtain celerity of production.

Another reason, why men are employed as time-workers, is frequently to be found in the difficulty of measuring or counting the output, as it is produced.

In cases in which the nature of the work done varies from day to day, if not from hour to hour, the difficulty of fixing a piece-wage for each job is generally so great that the operatives have to be put on time-wage.* When work is of an abnormal nature and more than usually difficult, it is often found that the attempt to fix a piece-wage for this "awkward work" leads to so much disagreement, that it is better to have it done on time-wage. The same is the case in regard to repairs, especially in regard to those kinds of repairs in which it is impossible to determine exactly what work will be necessary, until the repairer has actually begun the job, or to classify and price each item, so that there can be no doubt as to the remuneration due in respect of the job when done.†

* When work of a new kind is introduced, it is a common practice to put the workman on time-wage until it is seen how much he can do in a day; when this has been ascertained, and a basis upon which to fix the piece-wage price for each job has thus been arrived at, he is put on piece-wage.

† See *post*, p. 74. On the other hand, there are cases in which no difficulty is caused by getting repairs done on piece-wage; as, for instance, is the case with boot-makers in the "hand-sewn" trade,

One ground, upon which operatives, are in some instances put on time-wage, is the impossibility of maintaining the continuity of their employment. Thus, in a ribbon-weaving factory the writer found that the foreman had recently changed the weavers from piece-work to time-work. Before the weaver can begin his work, the loom has to be "set" by another class of operatives, and, while this is being done, he is necessarily idle.* It was in this case found impracticable to arrange a piece-wage, which should be so calculated as to avoid injustice to the worker thus frequently kept workless through no fault of his own; and, accordingly, these men were put on time-wage, being paid by the week and losing nothing in respect of the days or hours when they were off work. In some cases piece-workers kept waiting for work are paid time-wages while thus involuntarily idle (going back to piece-wages when their work is again ready for them).†

In this connection it is to be noted, that in many cases in which men are engaged by the week, and rated nominally at a weekly wage, it will be found that they are, in fact, paid by the hour, no pay being given except in respect to the time actually spent in

who, in London, have an agreement with the masters as to the exact piece-wage to be paid for about a dozen different kinds of repairs.

* As to similar cases in the woollen-weaving industry, see the evidence given before the Labour Commission by Mr. Allen Gee, secretary of the West Riding Power Loom Weavers' Association (*Evidence*, Group C., Vol. I., pp. 201, 203).

† See *Labour Gazette*, January, 1895, p. 19.

labour. Where a trade is fairly regular in volume, there, in a well-managed workshop, the continuity of the employment is fairly well maintained, so that the operatives, as a rule, always earn nearly the full amount of their nominal week-wage. On the other hand, in trades subject to periods of depression, especially "season" trades, the employees are frequently kept waiting a long time between one job and another; and, since no payment is made in respect of these intervals of compulsory idleness, their actual weekly earnings fall far short of the weekly wage at which they are rated.

CHAPTER IV.

TASK-WAGE.

Task-work must be distinguished from piece-work and from work done under various forms of the method of progressive wages (such as "time-wage piece-work"),* with which, as well as with piece-work, it is frequently confounded in popular parlance. In the case of a man employed on time-wage, although failure to produce a standard amount of output within a given period may lead to his dismissal, yet such failure does not give his employer the right to pay him less than the full amount of his wages for the time during which he has been at work; the man on time-wage piece-work, again, although, by working at a rate slower than that laid down for him, he will fail to obtain the reward of extraordinary assiduity, which is paid under this method, is yet, at any rate, secure of his *minimum* fixed wages. But, if

* *I.e.*, a fixed rate per hour with, in addition, a premium of so much money for each unit of output produced in the hour in excess of a standard quantity; see *post*, p. 87.

the task-wage workman does not complete within the specified period his "tale of bricks," then he has to suffer a corresponding deduction from his task-wages. At the same time, while the man employed on piece-wage is remunerated in exact proportion to the amount of his output, and while the man doing time-wage piece-work receives a premium commensurate with the excess of his output over a given amount, the man working on task-wage has no claim to anything beyond his fixed wage, in case he should produce an output beyond the required standard.

The adoption of the method of task-wage is said to take place in some instances in the following manner. The employer gives the workman a novel article to make on piece-wage. The man, working as fast as he can, turns out on the average x articles per hour. When his measure has been taken in this manner, he is put on task-work, with the obligation of producing not less than x articles per hour. Generally —it is alleged—this task-wage is fixed upon a lower basis than that of the man's former piece-wage; and it is obvious that the employer's chief reason for thus adopting the method of task-work must be to obtain the same amount of work as he got, when the man was on piece-wage, for less money than he then paid for it.

It is scarcely necessary to add that the method of task-work is regarded by the working-classes with extreme dislike.

CHAPTER V.

PIECE-WAGE.

ALTHOUGH, as remarked above (p. 43), time-wage is the method of wage-payment most widely prevalent in the United Kingdom, yet in a very large number of industries, especially, it would appear, in industries in which powerful trade union organizations exist,* piece-wage obtains to a very considerable extent.

The reasons, for which, in certain cases, employers prefer time-wage to piece-wage, have been stated in the preceding chapter. In relation to the danger inherent in piece-work, that in his desire to increase his earnings the workman may be led to pay insufficient attention to the quality of his output, it must be mentioned that experience shows it to be perfectly possible,

* "Of the 111 principal organizations, we see that forty-nine, having 57 per cent. of the aggregate membership, actually insist on piece-work, while seventy-three out of the 111, having 71 per cent. of the aggregate membership, either insist on piece-work, or willingly recognise it. The unions which fight against piece-work number thirty-eight, having only 29 per cent. of the aggregate membership" (*Industrial Democracy*, by Sidney and Beatrice Webb, p. 286 *n*).

in many industries, to guard against this contingency by proper precautions. That this danger exists, especially in cases in which it is difficult or impossible to test the quality of the work by inspection, is certain. But the cases in which this difficulty or impossibility exists are not so numerous as might be imagined. Thus, we find Mr. A. E. Seaton, managing director of the Shipbuilding and Engineering Company, Ltd., at Hull, in his evidence before the Labour Commission,* strenuously denying that piece-work among boiler-makers and iron ship-builders leads to "scamping;" the workmen know that the foremen of the yard and Lloyd's and the Admiralty Surveyors would not pass bad work. Similarly, Mr. A. Coventry, partner in Messrs. Smith and Coventry, of Manchester, engineers and tool-makers, told the same Commission that his firm find no difficulty in getting work of satisfactory quality done on piece-wage,† and Mr. A. F. Hills, managing director of the Thames Ironworks and Ship-building Company, Ltd., gave evidence to the same effect.‡ Certainly, it is beyond question that plenty of work, in the execution of which accurate workmanship is essential, is done, and done in a thoroughly satisfactory manner by workmen employed on piece-wage.

It may be of interest to note that the tendency of piece-wage to induce the workmen to sacrifice quality to quantity of output is in some cases guarded against, not alone by careful inspection, but also by limiting

* *Evidence before Labour Commission*, Group A., Vol. III., p. 340.
† *Ibid.*, p. 351. ‡ *Ibid.*, p. 314.

the output. Thus, in the watchmaking industry the writer has known an employer, with this object in view, to refuse to give out to any man more work in each week than would enable him to earn a specified *maximum* amount of piece-wage.

Speaking generally, it may be said that, except in those special cases in which the method of time-wage is considered superior on the grounds above indicated, piece-work is preferred by a large number of employers, as affording greater security for the performance of the *maximum* of labour of which the workman is capable without requiring, for this purpose, so large an amount of supervision as would be necessary to obtain this result, were the operatives employed on time-wage.* For although it is quite possible, by vigilant supervision, to exact from employees on time-wage a rigidly maintained *quantum* of production, yet in practice it is found that, as a rule, the speed exhibited by workmen on time-wage is considerably inferior to that shown in the work of operatives remunerated by piece-wage. This fact

* Compare the evidence given before the Committee on the Manufacturing Departments of the Army (1886-87) by Col. Maitland, R.A., Superintendent of the Royal Gun Factory, "if you have day-work, you at once want a tremendous lot of supervision to keep the men at work. For instance, in a night shift day-work would be almost impossible—you would find all your men asleep—therefore, we put every man who is on a night shift, with one or two trifling exceptions, on piece-work" (*Report*, 1887, p. 104). In a large engineering establishment, with which the writer is acquainted, it is the practice, when at the end of the regular working day a job is nearly finished, to offer the workman (who is on time-wages) a lump sum to stay on and finish the work before he leaves.

comes out with special distinctness in cases in which operatives, who have been working on time-wage, are put on piece-wage. Certain sole-sewing operators in a boot manufactory with which the writer is acquainted, when put on piece-wage, were found to have about doubled their output, with the result that four machines, worked by men on piece-wage, were shown to be yielding approximately the same amount of output as seven machines had previously yielded when the operatives were on time-wage. In a bicycle factory the superior activity of men on piece-wage was impressed upon the writer by seeing three brazing-hearths out of five standing cold and vacant—a puzzling sight, because the whole place was bustling with work, orders being plentiful. The explanation was that, the men having recently been put on piece-wage, two men were now doing the same amount of work as was formerly done by five men on time-wage. I have, in instances too numerous to mention, found that the excess of work obtained by putting men on piece-wage has been from 30 to 50 per cent.

In consequence of the superior rapidity of production, which the stimulus of piece-wage remuneration is able to secure, it would appear not improbable that, as the pressure of foreign competition, on the one hand, and of the demand for higher wages and shorter hours of labour, on the other, becomes more and more keenly felt, our employers may to an increasing extent endeavour to introduce piece-wage remuneration. In this connection two points may be noticed.

In many cases, in which machinery and motor power have taken the place of hand-work, it will be found that the operatives are, as yet, on time-wage. The reason is that the introduction of machinery and motor power have greatly diminished the cost of production, and, until the use of such machinery and power has become general, and has affected the market price of the product, the manufacturer has so great a margin of profit that he does not think it worth his while to put the workpeople on piece-wage. For the present he finds that, by discharging all who do not produce an amount of output more or less nearly approximating to the *maximum* possible, he can get enough work out of his hands for all practical purposes. But as competition on the part of rival manufacturers, now possessing similar appliances, grows keener, or as the workpeople succeed in obtaining successive advances in wages and reductions of working hours, their employer will be more and more likely to put on the pressure of piece-wage.

Further, it must be observed that the tendency of modern manufacture is in favour of production on a large scale. Now, one cause, which militates against the adoption of piece-wage is the practical difficulty which is experienced, when the operative is employed upon a succession of different kinds of work, because any attempt to price and pay for each job separately would lead to more trouble than is worth taking. This is the case with many of the employees in a small workshop, each of whom

must in turn perform different parts of the work; but in a large factory it is possible to employ the same operative, day after day, upon the same subdivided process. One result of an augmentation in the size of our manufacturing establishments may, therefore, be expected to be an increasing tendency to put the workers on piece-wage.

The reasons, for which piece-work is in some trades preferred, in others disliked, by the employees, will be examined in the succeeding chapter.

CHAPTER VI.

OBJECTIONS ENTERTAINED TO PIECE-WORK BY WORKING-MEN.

The fact that working-men in some cases prefer piece-wage to time-wage remuneration, and in other cases take a diametrically opposite view, is to a great extent to be accounted for by their belief that under time-wage or under piece-wage, as the case may be, the workpeople are more certain of getting full value for their labour, and of maintaining the standard rate of remuneration current in the trade.

In those cases, specially numerous, as has been already pointed out (*ante*, p. 50) in well-organized trades, in which piece-work is preferred, one principal reason for this preference is the conviction entertained by the employees that only under a system of payment, under which the maintenance of an exact correspondence between the amount of work done and the degree of exertion involved in doing that work, on the one hand, and the remuneration for this labour, on the other hand, is expressly made an

essential part of the wage-contract, is it possible for them to secure a full sixpence for every "sixpenny-worth of work" performed. If the workman on time-wage were in practice allowed to do, in return for his wages, as little work as he liked, then payment by time might be a comfortable system. But, in fact, the employer exacts from time-wage operatives the performance of a more or less strictly defined amount of labour; and it is not impossible for him, as in the cases cited in Chapter II., to keep on increasing the "tale of bricks" until he is getting far more for his money than originally contemplated. Against any such result as this the employee feels himself in a large measure safe-guarded by a system of piece-wage prices (under which the remuneration for every hour's work increases in exact proportion to the amount of output produced in the hour), especially if the price for each unit of output of every kind is settled between the employers and the trade organization of the workmen upon an uniform basis, securing for the men identical payment for identical or equivalent effort.

The advantage to be derived from piece-wage payment is particularly noticeable in trades in which machinery is extensively used, and in which that machinery is of different kinds and of various degrees of efficiency in different cases. The manner in which, by agreement between the employers and the employed, workmen in the cotton trade, employed in minding mules carrying different numbers of spindles and running at different speeds, have their piece-wages

fixed in such a manner as to secure uniformity of payment for identical effort, has already been explained (*ante*, pp. 33-35 and 41, 42). It will also have been remarked that in the case of these cotton-spinners the piece-wage system, regulated as it here is by a very powerful trade union organization, is able not alone to obtain for the operatives extra payment for the additional exertion, which is incidental to working up to more complex and swifter-running machinery, but also to procure for them a large share in the benefit ensuing from improved methods of production. These are advantages which, as the cotton operatives firmly believe, could not have been gained for them under any other method of remuneration than that of piece-wage.*

Another trade, in which, under circumstances analogous in a great measure to those existing in the cotton trade, the employees prefer piece-wage to time-wage, is the boot trade. The recent introduction of machinery to do work formerly done by hand, and of a novel system of working (the "team system"), have, while greatly increasing the productivity of the men's labour, considerably augmented the intensity of exertion required in its performance; and the workmen, with the object of securing an augmentation of their rate of pay proportionate to the increased exertion entailed upon them, and with the view of sharing in the advantages derived from the improved methods of production, and in order to avoid disputes about the

* See *Industrial Democracy*, by Sidney and Beatrice Webb, pp. 288, 289.

quantum of output which the employers insist upon the men's producing in return for their weekly wages,* have shown a marked reluctance to continue working on time-wages and a strong desire to revert to the method of piece-work which has for a long time been prevalent in their industry.†

With respect to the cases in which piece-work is objected to by working-men, before commencing our investigation of the grounds upon which objection is taken to this method, it is necessary to point out that "piece-work" is a term applied, in common parlance, to two distinct sets of industrial conditions, and when a working-man denounces "the abominable system of piece-work," it will often be found that it is to group work under the method of contract or sub-contract,

* The workmen allege that the employers keep on increasing, in an unreasonable manner, the amount of work which forms the piece-wage basis of the men's time-wage remuneration; see, for instance, the disputes mentioned in *Labour Gazette*, February, 1898, pp. 60, 61.

† Although Continental workmen are largely imbued with the Socialist prejudice against piece-work (see *ante*, p. 15), the Fifth International Congress of Diamond Workers, held at Antwerp in September, 1897, passed a resolution declaring that time-wage was, in every respect, injurious to the interests of their industry, and calling for the general introduction of piece-work. The special case of the bespoke tailoring trade deserves passing mention. Here time-wage is objected to because not applied all round. The employers, it is said, put a few men on weekly wages, and naturally take care to find work for these men, even in "slack" times, when the piece-workers are kept involuntarily idle (compare *Labour Gazette*, January, 1895, p. 27). The fact, that in certain cases workmen employed by contractors or by sub-contractors object to time-wage, will be explained by the remarks on these methods in later chapters (*post*, pp. 147-154 and 180-226).

and not to ordinary piece-work, that he refers. Leaving the methods of contract and sub-contract to be dealt with in future chapters, we will here examine the objections taken to piece-work of the ordinary type.

One sweeping objection to the method of piece-work rests on grounds moral, no less than material, being founded upon the facilities which piece-work in many instances affords for the growth of pernicious habits. Operatives in piece-work trades, and these by no means the least skilful or intelligent, often spend one or more days in total or comparative idleness, making up for the time thus given up to relaxation, not always of the most elevating character, by working at a furious pace during the rest of the week. The validity of this objection to piece-work will be admitted by all who are familiar with the facts; though it is scarcely necessary to point out that the evils inseparable from irregular labour exist in an extreme degree in many cases in which the workers are remunerated, not by piece-wage, but by time-wage, *e.g.*, in the case of "casual" dock-labourers.

Another ground, on which piece-work is frequently objected to, is the tendency considered to be inherent in this method to promote a degree of exertion prejudicial to the welfare of the individual workman and of the working-classes generally. To what extent this objection is valid, it is of interest to inquire. Adam Smith expressly declares that "workmen, when they are liberally paid by the piece, are very apt to overwork themselves, and to ruin their health and constitution in a few years;" and cites a case

mentioned by an Italian physician, an authority of repute in relation to the diseases incidental to industrial occupations.

"We do not reckon our soldiers the most industrious set of people among us. Yet when soldiers have been employed in some particular sorts of work, and liberally paid by the piece, their officers have frequently been obliged to stipulate with the undertaker, that they should not be allowed to earn above a certain sum every day according to the rate at which they were paid. Till this stipulation was made, mutual emulation and the desire of greater gain frequently prompted them to overwork themselves, and to hurt their health by excessive labour."*

With this may be compared the facts narrated to the writer by the head of a large firm in the tea trade. This employer took some of his labourers, men carrying heavy weights, from simple time-wage, and put them on time-wage piece-work (*i.e.*, a time-wage supplemented by a premium on the amount of work done); but, at the end of the first week or so, finding that the hope of earning a large premium had caused the men to gravely overtask their strength, and that they were visibly deteriorating in physique, he took steps to secure their working in future at a more reasonable rate. It is, however, submitted that the degree of over-exertion exhibited in cases like the two just cited may, in a great measure, be accounted for by the considerations urged by McCulloch, who remarks, "that this ultra zeal is not manifested, except in case of parties engaged for a short period only, or when they first begin to work under the system."†

* *Wealth of Nations*, bk. i., chapter 8.

† *Treatise on Wages*, p. 70.

Thornton says that piece-work "tends to make men overtask themselves."* Lord Brassey "has seen much to confirm" the opinion of Adam Smith stated above, and illustrates its correctness by the case

"of the slaves employed as coffee-carriers in the Brazils. These men are employed in removing bags of coffee, weighing from two to three hundredweight, on their heads, in and out of large warehouses and from the warehouses to the shipping. They often carry these immense weights a distance of three or four hundred yards. The men are the most powerful slaves in the Brazils, and they are paid at a fixed rate, in proportion to the amount of work performed. They work with the most intense vigour, in order to earn as soon as possible a sufficient sum wherewith to purchase their freedom, and generally succeed in accumulating the amount required in three or four years. But they are a short-lived race, and, in their devouring anxiety to accomplish their object, too often sacrifice their health by over-exertion, although they are well fed on dried meat, or salt meat from the River Plate, eaten with a large quantity of farinaceous food."†

This instance, no doubt, shows that men can, if performing exceptionally heavy work, under certainly an exceptionally strong incentive to exertion —stronger than exists in the case of ordinary workmen employed on piece-wage—be tempted into working at a rate seriously injurious to their health. What, however, we would wish to determine, would be the question to what extent the allegation, that the method of piece-wage tends to promote over-exertion, is borne out by the facts in the case of ordinary workmen.

This is a question to which my own observation

* *On Labour*, p. 315.

† *Work and Wages*, pp. 267, 268.

does not enable me to give any precise answer. Some men, employed on piece-wage, will strain every nerve to produce a large output; others will produce just so much output as will yield them certain accustomed weekly earnings, and no more; many will purposely turn out less work than they could comfortably produce,* because they feel sure that, if the employer sees that they can work at a higher speed, he will alter the standard of remuneration, and "nibble" their piece-wages down;† others, again, will restrict their output in deference to those ideas which will shortly be referred to under the name of "the theory of the Lump of Labour."

One point, in particular, deserves attention. In estimating the extent of the injurious pressure exercised by the method of piece-wage it is necessary

* "The witnesses differed in opinion as to whether the men tacitly agree together to restrict the work they perform to such an amount as would enable them to earn the normal rate of one-third in addition to their daily rating and no more, fearing that, if they earned more, the piece-work prices would be reduced. In some shops the uniformity of the earnings of the men seems to point to this conclusion, in others there is greater disparity, and instances were cited in the course of the evidence of individuals largely exceeding the general level of the wages made by their companions" (*Report of Committee on the Manufacturing Departments of the Army*, 1887, p. x).

† Or the employer, having by the payment of piece-wages yielding, say, time and a quarter earnings (*i.e.*, 25 per cent. more than the men's regular time-wage rates) induced the operatives to produce a large amount of output per hour, may put them on time-wage (at their ordinary rates), while insisting that they shall turn out as much work per hour as they did when on piece-wage. Instances, in which this practice is alleged to have obtained in engineering workshops, have been reported to the writer.

to take into account, not alone purely physical over-exertion, but also mental strain and worry. Take the case of a man whom I saw making screws; he was working two machines simultaneously, with the assistance of a boy; while, if he had been on time-wage, nothing would have induced him to work more than one machine. It is unquestionable that the nervous tension involved, in many cases,* in looking after two machines at the same time is considerable. What is more, workmen in engineering workshops state, as an universal fact, that the work turned out by a man on piece-wage is not, and cannot be, as good as that done by a man on day-wage, and is repeatedly returned, as not "passing gauge," to be amended "in the man's own time," which circumstance necessarily creates an irritation seriously increasing the strain incidental to this labour. On the other hand, the foreman, under whose supervision the mechanic making the screws just referred to was working, explicitly asserted that the rejection of work done on time-wage was almost as common as that of work done on piece-wage; and I believe this assertion to be not far from the truth.

With a view to ascertaining the actual facts in relation to the pressure incidental to piece-work I have taken numerous opportunities of watching

* There are, of course, cases, in which it is perfectly possible, without any undue strain on a man's powers, to work two machines simultaneously; the opposition to this practice is, no doubt, largely attributable to the Lump of Labour theory, which forbids one man to do "the work of two" (see *post*, pp. 80-86).

engineers in different workshops while they worked machines driven by power, such as lathes, boring-machines, planing-machines, &c. In some instances the workman would require very frequently to attend to the machine, guiding and regulating its action. But in other cases all the work seemed to be done by the steam, while the mechanic was generally occupied in contemplating the machine, occasionally adjusting it very slightly, but for the most part standing apparently idle, with his hands in his pockets. I could not for a long time see how a man working a machine under circumstances such as these could be led, by being put on piece-wage, into over-exerting his faculties in a manner detrimental to his health, or even to his comfort; until one day I came across a mechanic working a lathe, with whom I was able to chat freely in the temporary absence of the foreman. This operative pointed out that, although, when one of these machines is once set going, there is, for the time being, next to nothing in the way of hard work for the workman in charge of the machine, yet, before it is started, the machine must be "set," *i.e.*, the material to be operated upon must be placed in exactly the right position—right to a hair's breadth—in relation to the operating part of the machine; and it is here that, in a case like this, the strain and stress of piece-work come in.*

Certainly we are often somewhat prone to forget

* An engineering employer informed the Labour Commission that, with respect to machines other than lathes, one-fourth to one-fifth of the time of a machine is occupied in setting the work up on it

that working-men have nerves as well as muscles, and that brain-fatigue is by no means a monopoly of those to whom it is common to confine the designation of "brain-workers." Few things, as a matter of fact, can be more wearing to a man than to have to perform an operation demanding delicate and accurate adjustment "against time." If we were to compare the case of a workman performing as piece-work a job such as, for example, the boring of a pair of "eccentrics," to that of a surgeon engaged for nine hours in the day in performing a series of operations, such as lithotomy or trepanning, and obliged to do this at high pressure, "against time," we should, after making due allowance for the difference between the two cases, obtain a mental picture which would go far in helping us to realise how great a measure of validity is present in the objection made to piece-work as promoting, under circumstances of frequent occurrence, a kind and degree of exertion injurious to the well-being of working-men.

It might, perhaps, be said that there is no necessary connection between remuneration by piece-wage and special intensity of exertion, because the mechanic,

(*Evidence before Labour Commission*, Group A., Vol. III., p. 358, *n.*). It is not intended to suggest that the difference in the rate of output between men on piece-wage and men on time-wage is, in cases like these, wholly attributable to the superior speed with which the man on piece-wage sets his machine; much time may be saved in other ways, *e.g.*, if, while one job is in the lathe, the man will take care to be getting the next job ready for the machine.

who is on "time and a quarter piece-wage",* is under no compulsion, except greed of gain, to work faster than at the normal rate. But, even if a man be quite content to make "time" only, by working only at a normal (time-rate) speed, yet he generally has not the option of maintaining this moderate rapidity of output. For an employer, who puts his men on piece-wage, does so with the express object of forcing the pace; and thus a manufacturing engineer told the writer that he should certainly discharge any man in his employment who failed to make, at any rate, time and a quarter. That a faster pace is maintained where piece-work is the rule, than in workshops and on jobs where the men are employed on time-wage, is certain; and, wherever piece-work obtains, there workmen who are below the average standard of activity, or who have passed the prime of their vigour, find it difficult, or even impossible, to secure employment—a circumstance which should not be forgotten in considering the causes of the dislike often entertained by the working-classes to this method of remuneration.

To sum up the case in regard to the relation between piece-work and over-exertion. It must be admitted that there are certain circumstances under which piece-work is, undoubtedly, accompanied by a degree of exertion injurious to the well-being of the workman. Where the rate of pay is so low that a living can only be obtained by the maintenance of an excessive speed, there piece-work is

* See *ante*, p. 25.

extremely likely to be accompanied by over-exertion. Even where the rate of pay is in itself not specially low, yet if the work be intermittent in its nature, long periods of non-employment occurring, and especially if the supply of labour be considerably in excess of the demand, here, again, the necessity of providing for the wants of himself and his family by earning as much as possible, while the job lasts, will very possibly cause the workman to overstrain his faculties. On the other hand, in a trade in which the great bulk of the workers are able to obtain fairly constant employment, and in which the rate of pay is fairly adequate, there over-exertion will not be found to be an inseparable accompaniment of the method of piece-work. For, when free from the pressure of poverty, the British workman, as a rule, has a sufficient regard for his own health and comfort to leave a margin between his actual exertion and that which would be possible if he were to work positively "to the top of his bent." Take, for instance, cotton-weavers. If piece-work were, of itself, competent to secure the performance of the *maximum* of work of which the operatives are capable, how is it that employers, in order to encourage rapidity of production, invented the system of "bounties"*—premiums on rapidity of output supplementary to the piece-wage? or how could we explain the fact that the employers, as a rule, find themselves obliged, in order to get enough work out of their hands, to

* See *post*, p. 93.

insist on the utmost vigilance of supervision, the overlookers being paid, not by time-wage, but in proportion to the output of their subordinates, and being frequently discharged on the ground that they have failed to "drive" the operatives into turning out enough work? * And even under this "pushing" system, the weavers, as a matter of fact, never work to the top of their bent except just before the occurrence of a holiday,† when they wish to earn extra money for their amusement. No one would think of denying that the Lancashire cotton operatives work, on the whole, quite as hard as is good for them; but that these piece-workers invariably, or often, over-exert their faculties, can scarcely be asserted. And the same remark applies to our coal-miners and to the workmen employed in many other trades in which piece-work prevails.

Although no attempt will be made to give an exhaustive enumeration of all the causes of the unpopularity of piece-work, one circumstance, which

* See the evidence given before the Labour Commission by Mr. D. Holmes, president of the Burnley Weavers' Association, and by Mr. W. Booth, secretary of the Ashton-under-Lyne District Weavers' Association (*Evidence before Labour Commission*, Group C., Vol. I., pp. 34, 35, 39, 40, 45), and that given by Mr. T. Birtwistle, secretary of the North-east Lancashire Weavers' Association (*Ibid.*, pp. 53, 59, 61).

† See the remarks of Mr. Mundella and the evidence given before the Labour Commission by Mr. W. Noble, of the United Cotton Manufacturers' Association (*Evidence before Labour Commission*, Group C., Vol. I., pp. 167, 168). My own inquiries tend to establish the same fact in regard to the cotton-spinners.

largely tends to induce the best men in many trades to dislike this method, must be briefly alluded to. Remuneration by the piece, accompanied as it so frequently is, by the maintenance of a rate of speed so high as to be incompatible with really first-class quality of execution, is detested by workmen who take a pride in their work. Piece-work unquestionably leads, in many cases, to scamping. It is in piece-work shops that "those hateful words—*that will have to do*" (as a working engineer once called them)—are heard on frequent occasions. It is not meant to be asserted that every working-man, without distinction, objects to scamp his work. But it is undeniable that very many artisans are true artists, and honestly detest the slovenliness of execution, which is, in many industries, a concomitant of piece-wage remuneration. At the same time, it must not be forgotten that (as already pointed out) in numerous industries articles of unexceptional workmanship are habitually produced by workpeople employed on piece-wage.

We come now to that important class of objections to the method of piece-wage which relate to the effects of this method upon the remuneration of the workmen, and to its tendency to promote friction between them and their employer, who is believed, rightly or wrongly, to take advantage of this form of wage-payment in order to get "sixpennyworth of work" done for fivepence. It will be obvious that in any system of payment by the piece there is abundant room for serious differences of opinion

between the buyer and the seller of labour. In fixing piece-prices the employer in some cases appears to make the scale as high as he can afford to do, consistently with his earning his accustomed rate of profit;* in others he will keep an eye on the men's earnings, and, if he thinks that they are making too much money, will lower their piece-wage by "nibbling," *i.e.*, by an insidious process of continual petty reductions; in others, again, he will profess his willingness to allow the operatives to earn at the rate of, say, ninepence an hour; but, taking as his standard

* The owner of a slate-quarry told the Labour Commission that in fixing prices for the work, "We make, of course, a harder bargain upon anything that is not going to pay us;" while, on the other hand, if the rock promises to be rich in slate, then the men get prices fixed on a more liberal scale (*Evidence*, Group A., Vol. II., p. 5). Compare the evidence of the manager of another slate-quarry, *Ibid.*, p. 19. In a flint-glass factory the piece-prices paid for making thermometer tubes were stated to me by the employer to be on a considerably higher scale (*i.e.*, on a scale giving considerably higher weekly earnings) than those paid for making wine-glasses, for the reason, as he pointed out, that wine-glasses are always sold with only a bare margin of profit, while on thermometer tubes the firm can earn higher profits. Again, in confectionery works, where some of the articles manufactured, being novelties, yielded a higher profit than other goods, which, being subject to keen competition, were less profitable, I was told that a higher scale of piece-wage was paid on the more profitable articles solely by reason of their being more profitable. In like manner it will be found that in some establishments the piece-prices are higher in periods of profitable trade than in bad times; so that a job, which would in good times yield time and a third earnings, would in a period of depression yield no more than time and a quarter.

In connection with the point here adverted to—the fact that in some cases the employer pays for the labour of his workpeople virtually

the rapidity of output exhibited by one or two exceptionally fast workers—of the class called by working-men "chasers"—the employer fixes the piece-wage so low that, with these exceptions, the operatives are quite unable to earn more than 6*d* or 7*d* an hour without putting forth an intensity of exertion, which they maintain to be far greater than was contemplated in the wage-contract, and to which they take strong objection.

In passing, a few brief comments on the tactics just referred to may be permissible. First, as to "nibbling." Of course, if after a new article has been given out at a certain price, the workmen, who usually make, say, time and a third on piece-work, are found to be

"what the job will bear"—may be mentioned the cases in which a higher sum is paid per unit of output for work done on piece-wage than for similar work done on time-wage. Very often the price is the same under whichever system the work be done. Thus, under the old English statutes regulating wages, the time-wages paid per day and the piece-wage price of the amount of work customarily performed in a day were identical (see *Wealth and Progress*, by George Gunton, pp. 181, 182); so a London compositor, working under the trade union scale, gets 8½*d* for one thousand ens of nonpareil, the standard hourly wage being 8½*d*, and one thousand ens being the amount of nonpareil type which a compositor is able and is expected to set up in an hour. But sometimes more money is paid for a given amount of work when done on piece-wage than would be paid if it were done on time-wage, the reason being, as an employer told the Labour Commission, when explaining why the engines built by his firm cost more *for labour* when made on piece-wage than when made on time-wage, that the men work faster on piece-wage than on time-wage, and speed of output reduces the part of the total cost of production attributable to standing charges (for rent, interest, salaries of office staff, &c.). (See *Evidence before Labour Commission*, Group A., Vol. III., p. 358).

earning, say, time and three quarters, this most likely shows that a mistake has been made, the piece-prices having been fixed too high; and it is not at all unnatural that the employer should think it necessary to cut down the prices to such a level as will result in his men making, in the future, only about time and a third. All the same, it may well be doubted whether the employer is wise in making reductions of this nature. For where men know that, if they work hard, then their remuneration will be reduced, they will take good care not to run this risk by doing their best. An engineer of high distinction told the writer that, when he was managing some large works, he pledged himself to the workmen never to lower a piece-wage rate until the expiration of twelve months from its introduction, however much money the men might make; and experience proves that, if you want your men to "do their level best," you must rigorously abstain from nibbling their wages down, even if it be demonstrable that a mistake in their favour has been made in fixing prices.

Next, as to "chasing." While it is unquestionably true that working-men object to the exceptional ability of any one operative being used by the employer as a means of unduly forcing the pace, and of thus bringing about a reduction in the remuneration of the general body of workers, yet the allegation so frequently made by unfriendly critics of the working classes, that they object to piece-work because they dislike to see superior activity rewarded by remunera-

tion in excess of the normal rate, is altogether unfounded.

So far we have dealt with cases in which the employee knows beforehand what money he is to get for a given amount of work. If in cases like these the method of piece-work frequently makes for discontent, what can we expect when, as is sometimes the case, the relation between the work to be done and the pay to be received is unknown to the workman?* Take, for instance, a repairing job; in such a job are included a number of items, which it is usually impossible to price separately, and the number and character of which can frequently not be ascertained at all until the work is all but finished, fresh defects appearing as the stuff is opened up.† Is it wonderful that, when employers pay for repairs of this nature by piece-wage, constant and bitter disputes arise? Take, again, the analogous instance of the "lump" system so deeply detested in the cabinet-making trade, of which a description was given in his evidence before the

* One of the most curious examples of "pay-as-you-please" piece-work is the practice prevailing in regard to hop-pickers. Thus, we read that "a number of hop-pickers at Fairbrook, near Faversham, refused to work on Monday until they had been told how much would be paid to them on the completion of their work—a proposal which growers invariably refuse" (*Pall Mall Gazette*, September 26th, 1894).

† See *ante*, p. 45. While most of the work in building new ships is, as a rule, done by the piece, the trade union rules forbid repair work being done otherwise than on time-wages; see *Bye-laws for the Mersey District United Society of Boilermakers and Iron-Shipbuilders* (Liverpool, 1889).

Select Committee of the House of Lords on the Sweating System by Mr. Jelliffe, secretary of No. 1 Branch of the Alliance Cabinet-makers' Association:

"Lump-work is an abominable system, whereby the employers sometimes will give you a drawing which does not always denote the amount of work that is in it; and when you are started on the job, they will fix a price for it themselves; they do not give you the option of saying whether you can make it for the price or not, and then they introduce more work; but through the severe competition which we are put to, we invariably have to put up with it" (*Evidence*, Vol. I., p. 316).

Read, too, the evidence given in the same inquiry in regard to piece-work in the upholstery trade. In the workshops of a very well-known firm, the operatives are paid a piece-wage based upon a declared time-basis, each man being rated at a time-wage fixed in accordance with his ascertained speed in working. Now, if a man employed here had a chair given him to do, the piece-wage fixed by the foreman being 2*s* 3*d* (say three hours at 9*d*), then, according to the evidence of Mr. Baum, a working upholsterer, secretary of the London Society of Upholsterers—

"If by any mischance the wrong covering is given to it, or something is done that he is not able to do it in the three hours (it is not necessary that there should be fault of his own), he does not receive the pay for the additional hour that that chair would take him to do" (*Evidence*, Vol. I., p. 300).

Even apart from accidental hardships of this kind, the whole system of piece-wage adopted in this factory—a system which there is no reason to believe to be in any very marked degree more oppressive than that prevalent in many others—will be seen by refer-

ence to the evidence, not alone of the working-men witnesses, but also of the foreman, under whose exclusive control this labour was organized, to be such as might reasonably excite the suspicion and dislike of an employee possessing a moderate degree of self-respect and independence. When a job is given to a man, so many hours are allowed for its completion; if the man takes, say, two hours longer, then he "drops time," *i.e.*, he "works two hours for nothing." Perhaps he may make up his loss by completing his next job in two hours less than the allotted time; perhaps he may not. Now, since the foreman (as he himself said) is partly guided in fixing this time-limit by the necessity of getting the work done at a price which shall leave for his employers (to cover rent, taxes, salary of foreman, &c., and profit) a fixed per-centage,* since working-men are not prone to believe the estimate of the time required for the execution of a job made by a foreman to be infallibly correct, and since this time-limit is fixed by the absolute arbitrament of this foreman, it is not altogether surprising that this system of piece-work is viewed with strong disapprobation by the operatives engaged in the upholstery trade.

Enough will have been said to explain the nature of the grounds, upon which piece-wage remuneration is in many cases objected to, as tending to prevent the employee from securing a full sixpence for every "sixpennyworth of work" done by him. In trades,

* On the estimated value of the job; see *Evidence before Sweating System Committee*, Vol. I., pp. 689, 695, 696.

in which a fairly efficient trade union organization exists, an objection of this nature is felt with special force. For the aim of trade union combination is to obtain for all the members of the union a *minimum* rate of remuneration, fixed by a collective agreement between the whole body of the trade unionists, on the one hand, and the whole of the employers concerned, on the other, and securing that identical or equivalent effort shall receive identical payment in all cases. The object of the trade union is to arrange a scale of wage-payment under which, not only shall there be no danger of a workman who has been receiving a given sum for a given amount of exertion being called upon to put forth, in return for that sum, a greater amount of exertion, but there shall be a certainty that the relation between pay and exertion shall be the same for each and every member of the trade union. In a well-organized trade it is expected that no man shall find himself required to do "sixpennyworth of work" for fivepence; and "sixpennyworth of work" must be the same amount of work for every man.

The settled policy of trade union organization being of the character just described, the fact that many trade unions very strongly object to piece-wage remuneration will readily be understood. At the same time, it must not be supposed that the method of piece-wage is inconsistent with the principles of trade unionism. On the contrary, as has already been pointed out, many most powerful trade unions either insist upon, or have no objection to piece-wage, and the proportion of work-people employed under this

method appears to be higher in organized than in unorganized industries.

The trades, in which trade unions object to piece-work, will be found to be those, in which, for one reason or another, it has not been found practicable to fix by agreement between the employers and the employed piece-prices arranged in such a manner as to secure uniformity of pay for identical or equivalent effort. Perhaps the greatest of all obstacles to the making of such an agreement is the variety of the output. Where there is plenty of "repetition," where, that is to say, similar articles are produced by similar processes, day after day, no difficulty arises on this score. Even where a large degree of variety both in the nature of the output and in the circumstances under which this output is produced (speed of machinery, &c.) exists, it has, in many industries, been found possible to arrange a scale of piece-wage prices fulfilling the requirements of trade union principles. The arrangements of this nature in force in the cotton-spinning and in some other industries have already been described, and the reader who desires to make himself more fully acquainted with those obtaining in other trades (*e.g.*, cotton-weaving, woollen-weaving, hosiery, boot and shoe manufacture, hat-making, printing, &c., &c.) will find ample details in the *Report on Wages and Hours of Labour*, published by the Labour Department in 1894. In cases like these it is found possible to fix piece-wage prices upon an uniform basis, while any question, as to what is the proper piece-wage in any particular case, is settled between

the trade union and the employers, sometimes by simple negotiation, in many cases by the decision of a joint committee of masters and men, the services of an arbitrator being sometimes called in to decide a point as to which the parties fail to agree. It should be observed that in some instances, apart from the general organizations of the employees and of their employers, there exist, in addition, special committees formed of the workmen and the employers or their representatives in a particular establishment, such as, for example, those existing in the manufactured iron trade in several important establishments, which were described to the Labour Commission by Mr. Long, president of the Barrow Lodge of the Associated Iron and Steel Workers, and by Mr. Thomas, of the same Association (workmen's representative for Eston),* and the "Mill Committees" occasionally found in the woollen trade, to whose useful influence Mr. Allen Gee, Secretary of the West Riding Power Loom Weavers' Association, in his evidence before that Commission, bore emphatic testimony.†

On the other hand, in some industries, as, for example, in the engineering trade, there is very often a great variety in the nature of the work done, and in the processes employed in manufacture; and in industries of this character the method of time-wage is considered by the members of the workmen's

* *Evidence before Labour Commission*, Group A., Vol. II., pp. 312-316.

† *Evidence before Labour Commission*, Group C., Vol. I., pp. 203-209.

organizations to be the only system of wage-payment compatible with the maintenance of the standard rate of remuneration.

Before concluding our examination of the objections taken by working-men in some cases to the method of piece-work, reference must be made to those numerous instances, in which the dislike to piece-wage remuneration is based upon its tendency to promote a degree of efficiency on the part of the workman, which is considered to be prejudicial to the interests of his class. Thus, a workman, employed in a dockyard in making "washers" by the aid of a boring-machine, was asked by a visitor (whom this workman apparently took to be a trade union "investigator") how many washers he was making per day. The answer was—"Now that I am on piece-work, I am making about double what I used to make, when on day-work. *I know I am doing wrong. I am taking away the work of another man.* But I have permission from the Society." The words in italics are referable to the belief so firmly entertained by a large section of our working-classes, that for a man to exert his energies up to the point which just stops short of undue exertion—to do his level best—is inconsistent with his own interests and with loyalty to the cause of labour. The basis of this belief, which is in a large measure responsible for the unpopularity of piece-work, is that noteworthy fallacy to which it is desired to direct attention under the name of "the theory of the Lump of Labour."

In accordance with this theory it is held that there

is a certain fixed amount of work to be done, and that it is best, in the interests of the workmen, that each man shall take care not to do too much work, in order that thus the Lump of Labour may be spread out thin over the whole body of workpeople. As the result of this policy, it is believed that, the supply of available labour being in this manner restricted, while the demand for this labour remains (as it is supposed) unchanged, the absorption into the ranks of the employed of those who are now out of work will follow as a necessary consequence.

In relation to this idea it must be pointed out that it is not altruistic sentiment alone that makes a working-man reluctant to do more work than at present for fear of increasing the number of the unemployed. Any increase in the number of the unemployed not only casts a heavy burden upon the funds of the trade union, if out-of-work, or even travelling, pay is among the benefits which it gives to its members, but must also in all cases augment the number of men whom dire distress may at any moment induce to "scab the work," *i.e.*, agree to work upon terms less favourable than those demanded by the organized workers, and so tends to depress the rate of wages all along the line. On the other hand, if by any means it may be possible to bring about a state of things in which the available supply of labour shall have become smaller than the demand, then, since (as it is assumed) two masters will now be running after one man, the operatives, having succeeded in this "corner," will,

it is hoped, be able to obtain for their labour a very much better price than at present.

This is a programme which has for a long time fascinated the minds of our industrial classes. Going back some sixty odd years to the early days of combination in the woollen cloth trade, we find the trade union attempting to reduce output in a characteristic manner :—

"The overlookers of a large factory were summoned before the committee, and ordered to pay the workpeople in their establishment at the rate of 21*s* a week, and not by the piece. Upon this, the overlookers produced the books of the mill, and proved to the committee that the men were then earning 23*s* a week at piece-work."

The orders of the union were obeyed ;

"and at the end of the week the master discovered that his workpeople had only turned off as much as was worth 15*s* at the usual price. . . . The absence of the stimulus of being paid according to the work done was doubtless one cause of the relaxed exertion of the men, but the large decrease was owing to the express commands of the committee." *

In many of the rules prohibiting a man from doing his level best (for example, the rules restricting the number of bricks that a man may carry to a great height, mentioned by Thornton,† and explained by Howell,‡ and in the regulations established by the Glasgow plasterers, referred to *ante*, pp. 23, 24, we can recognise as their principal object the discouragement of injurious over-exertion on the part of the

* This account is taken from *Workmen and Wages*, by J. Ward, pp. 97, 98.

† *On Labour*, p. 329.

‡ *Conflicts of Capital and Labour*, 2nd edit., p. 338.

workmen and the prevention of "nibbling" * and of "chasing," "forcing the line," and similar obnoxious practices on the part of employers;† but in others there is no concealment of the fact that the aim is to spread the Lump of Labour thin. Thus, the Bradford lodge of the Labourers' Union was, during the Trade Union Commission of 1867-1869, shown to have the following rule:—

"You are strictly cautioned not to overstep good rules, by doing double the work you are required by the society, and causing others to do the same, in order to get a smile from the master. Such foolhardy and deceitful actions leave a great portion of good members out of employment all the year round."

In the same sense is the condemnation of piece-work cited by Mr. J. Ward, from *The Trades Union Magazine*:—

* See *ante*, p. 71; in this connection may be mentioned an instance, mentioned to the writer by a man of eminence among our working-men co-operators. He at one time attempted, with the assistance of several officials and ex-officials of the trade unions of the operatives in the glass manufacturing industry, to found a co-operative glass-workers' association. It is the custom with the members of these trade unions to discourage the production of more than a certain quantity of work in each shift, and the promoter of this co-operative society asked the officials of the unions whether, since the men to be employed in the projected factory would be working on their own account, these operatives would be allowed to work free from this restriction, and to produce as large an output as possible. This request met with a point-blank refusal—a refusal explicable by the fear entertained that to break down the established custom might lead the employers to reduce the standard rates of remuneration by increasing the *quantum* exacted as a "day's work;" see *ante*, pp. 27, 28, and *post*, pp. 115, 116, 128, 129.

† See *ante*, pp. 71, 72, and *post*, p. 94, 95.

"The worst passions of our nature are enlisted in support of task-work [piece-work is meant]. Avarice, meanness, cunning, hypocrisy, all excite and feed upon the miserable victim of task-work, while debility and destitution look out for the last morsel of their prey. A man who earns, by task-work, 40*s* per week, the usual wages by day being 20*s*, robs his fellow of a week's employment."*

The theory of the Lump of Labour will be seen to rest upon the utterly untenable supposition that a fixed amount of work exists, which has to be done, and will be done, irrespective of the conditions under which work is done, and, in particular, irrespective of the efficiency of the labour employed, and that, the less work is done by any one workman, the more work remains to be done by all other workmen. A full

* *Workmen and Wages*, p. 244. Compare the objection to co-operative piece-work, which Mr. R. Cridge, a stevedore, stated to the Labour Commission. "They [men on piece-work] work ever so much harder than they do at day-work, and therefore double their wages. It is not at all an uncommon thing for our men to earn 16*s* or 17*s* a day while executing that work. You are prepared to admit that is more than double the wages [of men on time-wage]. Now, that, I should say, is not right, inasmuch as, if they were to share that day's labour and wage among so many men that are standing outside, it would be better for all persons concerned" (*Evidence before Labour Commission*, Group B., Vol. I., p. 181). With regard to a strike of french polishers against piece-work in a Limehouse factory, we find a well-known member of the London Trades Council urging that "if the system were abolished, one-third more hands would be employed than were employed at present" (*Daily Chronicle*, December 2nd, 1892). So, again, in an agitation in the building trade, we are told that "the great bone of contention is as to the proposal of the employers that piece-work and sub-letting shall again be substituted, and this system on the part of the men is denounced as a retrograde step, and not in the interests of the public. In the case of the labourers, the reintroduction of this system, it is stated, would involve each man doing two men's work" (*Daily Chronicle*. April 19th, 1895).

treatment of this subject would take us too far afield. But the character of this fallacy will best be understood, if the objection entertained to a man's doing his level best is compared with the precisely similar objection to a man's using the best available tools, in other words, with the popular objection to the use of motor power and machinery. No clear thinker believes that, in order to provide labour for the unemployed, it is advisable that we should give up steam ploughs for ordinary iron ploughs, these again for wooden ploughs, and, in the ultimate resort, should abandon these instruments and scratch the ground with the fingers. Just so, in regard to this doctrine of the Lump of Labour, it should be perceived that it is against the best interests of the community at large, and, first and foremost, of the working-classes, for working-men to handicap the industry of the nation in deference to a theory which proclaims it to be the duty of every man to work, as it were, with one hand tied behind his back.

With the question of the length of the working day we have here nothing to do. Still, I shall not conceal my opinion that the claim of the working-classes to possess an amount of leisure adequate for the purposes of rest, of education, and of recreation is one in an eminent degree deserving of recognition. But, while a reduction of the hours of labour—say, to eight in the day—may readily be admitted to be, on grounds both economic and social, highly desirable, yet it is no less desirable that during those eight hours every working-man in the country shall, using the best

available tools and machinery, and performing as much labour as he can perform without exerting himself to an extent prejudicial to his health or inconsistent with his reasonable comfort, produce as large an output as possible. In the interests of the people as a whole it is expedient that the remuneration of the labour of the industrial classes shall be increased; and, since this remuneration is paid out of the national income, it is a matter of great importance, not only that the working-classes shall succeed in obtaining for themselves a far ampler share in the national income than they at present receive, but also that the productive powers of the working-classes shall be exercised in a manner calculated to secure that this income shall be of the largest possible dimensions.*

* Among the cases of restriction on output by workmen not connected with the theory of the Lump of Labour two appear to deserve brief notice. Among tin-plate workers attempts are commonly made to limit the output, with the view of preventing the market from being overstocked and prices, and consequently wages, being lowered (see *Labour Gazette*, January, 1895, pp. 19 and 26; February, 1895, p. 62; March, 1895, p. 94). In regard to the policy of "ca-canny," which it has been proposed (in one case successfully) to introduce among dock labourers, the object was to show resentment for what were considered to be unsatisfactory conditions of employment by doing as little work as possible. As explained in a leaflet issued by the International Federation of Ship, Dock and River Workers, the basis of this policy is, "Pay workmen an insufficient wage, and you have no more right to expect the best quality and quantity of work than you have to expect to get a 5*s* hat for 2*s* 6*d*" (*Times*, October 10th, 1896); see also *Report of Executive of the National Union of Dock Labourers in Great Britain and Ireland*, 1891, pp. 14, 15.

CHAPTER VII.

PROGRESSIVE WAGES.

The common characteristic of all forms of progressive wages is that in every case a fixed or *minimum* wage is supplemented by a premium paid in respect of efficiency.

"Time-wage piece-work," the first form of progressive wages to come under our notice, differs from piece-work pure and simple in this, that the employee engaged on time-wage piece-work is guaranteed a *minimum* remuneration, the amount of which is based upon the length of the period during which he is occupied, irrespective of the amount of work turned out during this period, with an agreement, that, if this amount shall exceed a specified *quantum*, then the man shall get an additional sum, proportionate to the excess of the output over this standard, as the price of this extra work. In piece-work proper this guarantee is, of course, absent.*

* In some cases work is given out at piece-wage prices, but with an express guarantee that every man shall receive at the end of the

This method may be illustrated by the case of workmen in engineering workshops, making articles such as, for instance, valves, at a fixed time-wage with an arrangement that every valve produced in excess of a specified number shall entitle the workman to a specified addition to his time-wage. It may be remarked, that the reason given to the writer in one case, and no doubt existing in many other cases, to explain the adoption of this system was the desire of the employer to induce the men to work at a high rate of speed, while avoiding putting them on simple piece-wage. For, many engineers, especially members of the trade union, entertain a great objection to piece-work.

Another illustration of the method now under consideration may be found in the boot trade. When the writer was investigating this industry in the course of the inquiry undertaken in connection with *Life and Labour of the People*, edited by Mr. Charles Booth, he observed that, while the majority of the men working sole-sewing machines in the East London boot trade were on ordinary time-wage, certain of these operatives received, in addition to their time-wages, a specified sum for every pair of boots over a fixed number sewn within the week. The reason here

week a fixed *minimum* sum, say time or time and a quarter wages, *whatever his production may have been.* The method adopted in such cases is, of course, not piece-work, but progressive wages. The amount, by which the sum of the piece-prices of the work done in the week exceeds the stipulated *minimum* pay, is a premium on speed of working supplementing the guaranteed time-wages.

was this. As a rule, these men either work as servants in the factories of the manufacturers, or else work machines of their own, carrying on this industry on their own account. In the former case the supervision of the employer, in the latter the operator's desire of gain secures his putting forth his best energies. But the employer, for whom these men on "time-wage piece-work" were working, was a man who owned a number of machines scattered through the boot-making districts at a great distance from his office. He had adopted this system in order to induce these operatives to work at a speed, which it was not likely that they would under these circumstances exhibit, if on simple time-wage.

One class of workers, to whose labour the method now under consideration is specially applicable, is young hands being taught their trade, and especially indentured apprentices. For all such beginners the promise of an addition to their small fixed wages dependent upon their putting forth their best exertions affords an incentive of great practical value, this method rewarding perseverance and industry with a graduated scale of reward proportionate to the increasing proficiency of the novice. In some cases this extra remuneration takes the form of a gift not strictly proportionate to the output, but withheld if the amount of the output is unsatisfactory; in others a more rigid system is adopted—a true system of "time-wage piece-work."

To exemplify by a concrete example, we may take the case of apprentices, whom the writer saw at work

in the movement-cutting room of a large watch manufactory. The *minimum* output, which must be reached before any "exertion-money" is earned, is fixed by the foreman, who tests the matter by himself working each machine. All work turned out above this *minimum* is paid for in proportion to its excess over this standard. Here are the earnings for four weeks of two girls rated at 10*s* per week, but each of whom, as will be seen, lost some of this time-wage through coming late to work:

A.	Total earnings . . .	£3	1	$7\frac{1}{2}$
	Time-wage	1	19	$8\frac{1}{2}$
	Exertion-money . . .	1	1	11
B.	Total earnings . . .	2	13	$4\frac{3}{4}$
	Time-wage	1	19	$7\frac{1}{2}$
	Exertion-money . . .	0	13	$9\frac{1}{4}$

It will be observed that apprentice A managed to earn a bonus on output equivalent to an addition to her time-wages of a little over 55 per cent., while the premium secured by B was at the rate of not quite 35 per cent. on her time-wage earnings.

The extent, to which, in some cases, the fixed or *minimum* wages of Continental workers are supplemented by exertion-money, may be exemplified by the instance given in M. Paul Leroy-Beaulieu's *Essai sur la répartition des richesses* (p. 373) in regard

to weavers; "a female weaver, who has in a fortnight's work, produced a quantity of cloth exceeding the specified *minimum* output by one piece, receives, as exertion-money in addition to her ordinary piece-wage, the sum of 2 francs [1*s* 7·2*d*]; but if her excess amount to two pieces, she gets, not only 2 francs (premium) for each extra piece, but also, as special exertion-money, the further sum of 1 franc [9·6*d*]," say, in all, 5 francs [4*s*].* M. Leroy-Beaulieu calls this system "progressive wages," a term which I have ventured to adopt, and to extend to other closely allied methods of remuneration. The particular case cited by M. Leroy-Beaulieu I should call "Progressive Piece-wage."

When a premium is offered under the method of progressive wages in order to secure speed in working, care must be taken that quantity of output is not gained at the expense of quality. In a case, which

* Further to illustrate the large premiums paid in France may be mentioned a case (communicated to the writer by M. Émile Chevallier, author of *Les Salaires au XIXme Siècle*) in which a manufacturer of fishing-nets pays his workmen thus: If a man makes sixteen nets, or any smaller number in a month, he receives 3 francs [2*s* 4·8*d*] for each net; if he makes more than sixteen in the month, then for the seventeenth and eighteenth net he receives 3½ francs [2*s* 9·6*d*] apiece; for the nineteenth and twentieth, 4 francs [3*s* 2·4*d*] apiece; for the twenty-first and twenty-second, 5 francs [4*s*] apiece; and so on. In regard to progressive premiums in textile trades in Germany, see F. O., Ann. Ser., 1896, No. 1752. Compare the differential rate system of piece-work in force with the Midvale Steel Company of Philadelphia, which is thus described in a paper read before the American Society of Mechanical Engineers at their Detroit Meeting, in 1895, by Mr. Fred W. Taylor: "Suppose twenty units or pieces to

came to the notice of the writer, yarn-washers (in the woollen trade) had to be taken off time-wage piece-work and put on simple time-wage, because under the former method they were induced to "rush," and scamp the work.

It should be observed that the system of paying a bonus on output appears to exist in at least three distinct forms. First, we have the system above described, in which each worker gets a premium proportionate to the excess of his work over the standard output. A second form is that in which each worker, who exceeds the standard, gets a premium fixed irrespective of the ratio of the excess to the standard. This might be called premium day-wage or premium piece-wage, according to the nature of the fixed or *minimum* wage of which the premium is the supplement. As an example of workers remunerated by premium day-wage may be mentioned the wine-bottlers, whom I found at Rheims receiving 5 francs

be the largest amount of work of a certain kind that can be done in a day. Under the differential rate system, if a workman finishes twenty pieces per day, and all of these pieces are perfect, he receives say 15 cents [$7\frac{1}{2}d$] per piece, making his pay for the day $15 \times 20 = 3$ dols. [12*s* 6*d*]. If, however, he works too slowly, and turns out, say, only nineteen pieces, then instead of receiving 15 cents per piece, he only gets 12 cents [6*d*] per piece, making his pay for the day $12 \times 19 = 2$ dols. 28 cents [9*s* 6*d*], instead of 3 dols. per day. If he succeeds in finishing twenty pieces, some of which are imperfect, then he should receive a still lower rate of pay, say, 10 cents [5*d*] or 5 cents [$2\frac{1}{2}d$] per piece, according to circumstances, making his pay for the day 2 dols. [8*s* 4*d*], or only 1 dol. [4*s* 2*d*], instead of 3 dols." (*Economic Studies*, Vol. I., No. 2, published by the American Economic Association, p. 113; see also *Cassier's Magazine*, February, 1898, p. 369).

[4*s*] a day, with a *prime* of 1 franc [9·6*d*] extra if the man bottled more than a certain number of bottles in the day. Premium piece-wage was formerly common in the Lancashire cotton trade, until the trade unions procured its abolition, except in a few factories remote from their influence.* When, under the form of progressive wages now under consideration, he offers a premium if a certain *quantum* of output be exceeded, the prudent employer takes care to fix that *quantum* so high that it is practically impossible for many hands to earn the "bounty." Otherwise,

* As to the various forms of bonus on output still occasionally paid to the operatives in the Lancashire cotton trade and the objections entertained to the system, see the evidence given before the Labour Commission by Mr. D. Holmes, president of the Burnley Weavers' Association (*Evidence*, Group C., Vol. I., p. 39). Mr. Holmes, who said that the "bounty" system does not prevail much, defined the bounty as "a stimulant that is administered in order to get those most efficient to produce the greatest amount to the detriment of those who cannot." The operatives having by the hope of earning bonus been incited to produce the utmost output of which they are capable, the employer—Mr. Holmes explained—thus ascertains what is the quickest rate that the very best weavers can maintain, and then proceeds to discharge all those whom he finds to be incapable of working at this speed. As to the bonus system in the woollen trade and its objectionable features, see the evidence given before the same Commission by Mr. W. H. Drew, representing the Bradford and District Branch of the Weavers' Association. Mr. Drew stated that the employers, as soon as by offering a bonus they have discovered the highest speed that a weaver is able to maintain, begin to nibble the piece-wage (*Evidence before Labour Commission*, Group C., Vol. I., p. 223). See also *Yorkshire Factory Times*, November 8th, 1895, where mention is made of the payment to woollen weavers of premiums of 2*s* a month, if their ordinary wages reach a certain amount, 3*s* if a further amount, up to 6*s* as a *maximum* bonus.

in his effort to set the hands racing, one against another, he might find himself, more often than suits him, paying a bonus of 1*s* or 1*s* 6*d* in return for an excess of output not worth more than 3*d*. In the third form of the bounty system a prize is offered to a small number among the operatives (sometimes to one only) who may within a given time produce the greatest output. The writer has known this system in force among female operatives in large telegraph construction works.* This might be termed prize day-wage or prize piece-wage, as the case may be.

The payment of a premium, or of extra wages to one operative among a number, with a view to forcing the pace of all, is a practice strongly condemned by the trade unions. In cases, in which an employer finds it impossible to induce his men to work on piece-work, it is not uncommon for him to obtain a high output in return for time-wages by giving a *douceur* to one or more operatives, who set the pace

* In a letter to *The Sun* (April 24th, 1895) an employee of certain Stores writes: "In the case of countermen, in the different sections, annual bonuses of £5, £3, and £2 are given to the three who execute orders to the highest value, providing the average is over £120 per week, and their book is free from mistakes. In the case of packers in their different sections, the bonuses are £3, £2, and £1 respectively, providing they pack on an average a given number of cases per week. Now this system is so craftily worked that if every man exceeded these averages, only the three highest in each section would get the bonuses. Hence bad feeling of every description is created among the men; for the number who receive bonuses is less than 20 per cent. of the countermen and packers."

and keep their fellows up to it. To this class belong the "chasers" to be found in engineering workshops, and the "runners" and "bell-horses" employed on building jobs. The runner's duty is a sort of all round hurrying-up and hustling; the bell-horse acts in the same capacity, especially in "forcing the line." The best general explanation of his functions may be given, if we suppose two men starting on a line of brickwork, and having to meet in the middle. If either of these bricklayers finds it made worth his while, he can, by working fast himself, compel the other to follow suit; and the same is the case where many more than two bricklayers are at work, though where the line is long, the employer will, if possible, put on a bell-horse, remunerated by some sort of addition to his regular wages, at each end of the line. The oppressive tendency of this peculiar system of prizes will not escape the reader, who should compare the remarks contained in Chapter XIII., *post* (on "piece-wage foremanship"), many of which will apply with equal force to the method adopted in cases similar to those just described.

In some instances, in which a fixed or *minimum* wage is supplemented by a premium, the amount of this premium is made to depend upon the qualitative, rather than the quantitative, character of the work done, as exhibited in the avoidance of waste, in the perfection of the result obtained, and so on. Examples of this method will be found in the working of railways. Engine-drivers are in many cases paid a premium based upon the economy effected in their

use of coal* and oil, and also rewards based upon the punctuality with which their trains are run, and receive special additions to their regular pay in respect of special zeal and discretion, by which accidents are avoided. In the same way, engine-cleaners on some lines are paid a small sum in respect of every tyre in which they discover a crack.† Some companies give a half-yearly bonus to each signalman who does his work satisfactorily.

With regard to the payment of premiums for avoidance of waste, care must be taken lest the men be tempted and permitted either to sacrifice efficiency to economy, as occurs when an engine-driver, rather than use sufficient fuel, brings his train in late, or to produce a false appearance of economy by using material improperly obtained, as is said to occur in the case of engine-drivers, against whom I have heard allegations made of surreptitiously appropriating coal provided for use in railway-stations. The first of these defects in the method now under consideration

* Compare the bonus to stokers employed at the electricity generating stations of the Vestry of St. Pancras, mentioned in *Labour News*, July 3rd, 1897 (bonus of £20 for each station, "for every tenth of a penny saved in the cost of the coal bill below a certain *maximum* amount").

† It may be of interest to remark that, in the construction of engines, &c., if the operative discovers a flaw in the material, he in some cases receives what is virtually a premium on vigilance. For, in some workshops, if an operative detects such a flaw, he is paid the full piece-wage of the operation on which he was engaged, though the (*e.g.*) axle, which he is turning, is at once condemned, and no more work done upon it. If he is on time-wage, he receives a present of one day's pay.

is usually obviated by awarding a premium for punctuality in addition to that given for economy, so arranged that it is made to the interest of the driver to secure punctuality, even at the expense of economy;* but the latter defect seems inseparable from the system.

In the same economic category with "time-wage piece-work" must be placed those numerous cases in which a man in receipt of a fixed wage or salary receives, in addition, a commission on sales effected by him. These are all cases of progressive wages.

The payment of commission to salesmen is most common in those cases, in which either the establishment is of fairly considerable dimensions, or the sales take place at a distance. In neither case is it feasible for the employer by incessant personal supervision to secure the exhibition of the fullest possible amount of zeal on the part of an employee in receipt of a simple time-wage. Thus, the salesmen in large linen-drapers' shops are given, in addition to a weekly wage, a commission on the sales which each may effect;† the same

* In France the premium for punctuality is treble that on economy; "English Railway Problems," by Hon. T. C. Farrer, *Economic Journal*, June, 1891, p. 354.

† In some cases a special premium is paid to shop assistants for selling certain classes of goods not readily saleable, or particular classes of goods which may be made to show a profit on a quick turnover. Care must, however, be taken lest the assistants, tempted by the hope of earning premiums, press these articles unduly—possibly even refusing to show goods required by customers (see *Daily Chronicle*, March 17th, 1898).

method is usually adopted in regard to commercial travellers.

In respect to salesmen in shops it must be pointed out that one evil result almost necessarily accompanies the ordinary practice of giving commission on sales. If shopman A is too busy to attend to a customer, he frequently, instead of passing this client on to shopman B, who is disengaged, does his best to get the customer to wait about until he, A, is free to look after the matter; and, often, before this occurs, the intending purchaser, his patience being exhausted, walks out of the establishment, perhaps never to return. This undesirable result of giving commission to salesmen may to a great extent be obviated by making the commission a sum dependent upon the total sales of the whole department and divisible among all the employees as collective remuneration.*

With regard to commission on sales it must further be remarked that, under certain circumstances, the payer of commission stands a chance of over-reaching himself. For the salesman may not only be tempted into selling on credit to persons whose credit is bad (though fear of dismissal generally prevents this), but in his eagerness to sell a large amount of goods may make his sales at prices unduly low. These observations apply, of course, not so much to salesmen in retail shops as to that considerable class of salesmen and travellers employed by wholesale firms, to whom a more or less wide discretion in regard to the matters here alluded to is given. In a case like this

* See *post*, p. 131.

I have known an employer, for the reason above indicated, to give his salesman, in addition to his salary, and in place of a commission, a small share in the profits of the business.

In connection with the subject of progressive wages attention must be called to certain more or less elaborate forms of this method to which the name of "Gain-sharing" has been applied by one of the principal exponents* of these systems—a name by no means free from awkwardness, but possessing, at any rate, a considerable measure of practical utility as distinguishing these schemes, under which the amount of the bonus is proportionate to the "gain," or saving in cost of production, *irrespective of the rate of profit realised by the employer*, from schemes of Profit-sharing, under which the amount of the bonus is dependent on the realised profits of the business, and so helping to prevent the not uncommon confusion of two methods of remuneration essentially divergent in their nature.

For a full description of certain typical examples of Gain-sharing, which cannot be reproduced within the limits of these pages, the reader is referred to the *Report on Gain-sharing* [C.—7848 of 1895], by

* Mr. Henry R. Towne; see his paper, describing the system in force in the Yale and Towne Works, read at the Erie meeting of the American Society of Mechanical Engineers in 1889, and printed in the *Transactions* of this Society, Vol. X., pp. 600 *et seq.*, and reprinted, with later communications from Mr. Towne, in the *Report on Gain-sharing*, referred to in the text; Mr. Towne's original paper is also reprinted in *Economic Studies*, Vol. I., No. 2, published by the American Economic Association.

the present writer, published by the Labour Department.* But for a brief account of two of the schemes, full details as to which are given in that *Report*, space must be found. The first of these schemes is that introduced in 1891 in the workshops of the Rand Drill Company at Sherbrooke, in Canada, by Mr. F. A. Halsey, manager of the Canadian branch of that company—workshops in which from eight to fifteen persons (not all employed under this system) are engaged in the manufacture of rock drills.†

The essential feature of Mr. Halsey's plan consists in fixing, on the basis of previous experience, the

* The reader anxious to further investigate the method of progressive wages will also find useful details in regard to this system, both as applied in the case of men working single-handed and as applied in the case of groups, in a book published in connection with the Paris Exhibition of 1889 by the Comité Départemental du Rhône, *Rapports et Documents de la Section d'économie sociale et d'assistance*, Lyons, 1889, especially as to the Maison Dognin, and in the Report on the same social economy section prepared for the Canadian Government by M. Jules Helbronner, where see as to the Moutier works, the carding and spinning factory of Seydoux, Sieber & Co., and the mines and foundries of La Vielle Montagne. See also (as to the system in force with Mr. Dolge, an American manufacturer of piano-felt and felt shoes) *Congrès International de la Participation aux Bénéfices*, Paris, 1890, p. 138, and *Chambers' Journal*, September 19th, 1891, pp. 596-598.

† Mr. Halsey's plan was described by him in a paper presented at the Providence meeting of the American Society of Mechanical Engineers, held in 1891, and printed in the *Transactions* of the Society, Vol. XII., pp. 755 *et seq.* This paper, together with subsequent communications from Mr. Halsey, is printed in the *Report on Gain-sharing*, referred to in the text, pp. 26-39. The paper is also reprinted in *Economic Studies*, Vol. I., No. 2, published by the American Economic Association.

time required to do a given piece of work, and offering the workman, if he can get the job done in less than this standard time, a premium for every hour saved in its execution. In carrying out any scheme of this nature, Mr. Halsey recommends that care be taken to fix the standard time on the basis of what an average, and not what an exceptionally quick operative requires for the performance of the job, and further advises that the premium be not unduly high. If the opposite plan be adopted—if, that is, the standard time be too short and the premium too high—the workman of only average capacity will fail to earn any bonus, and will soon give up trying to get the work done in less than the standard time, while the quick man will earn so large a premium that the employer will be tempted to nibble down the rate of remuneration. If you start with a scale of standard time and premium which you afterwards find to be insufficiently favourable to the operative, it is always easy to raise it,* and no objection will be made to the change. But to cut down your scale, once started, is, Mr. Halsey most strongly insists, a "fatal step." "If the premiums be cut, the workmen will rightly understand it to mean, as under the piece-work plan, that their earnings are not to be permitted to pass a certain limit, and that too much exertion is unsafe. The very purpose of the plan is to avoid this by so dividing the savings between employer and employee

* It is Mr. Halsey's practice, when raising the scale, to do so by increasing the standard time, while leaving the premium rate unaltered. This he does in order to avoid a multiplicity of premium rates.

as to remove the necessity for cutting the rate, and hence enable the workman's earnings to be limited only by his own ability and activity. The baneful feature of the piece-work plan is thus completely obviated, and instead of periodical cuts with their resulting ill-feeling, the premiums lead the workman to greater and greater effort, resulting in a constant increase of output, decrease of cost and increase of earnings."

With regard to the amount of the premium offered for each hour saved, this will always be less than the man's ordinary hourly time-wage; how much less, will depend on the nature of the work. "In certain classes of work," Mr. Halsey remarks, "an increase of production is accompanied with a proportionate increase of muscular exertion, and if the work is already laborious, a liberal premium will be required to produce results. In other classes of work increased production requires only increased attention to speeds and feeds with an increase of manual dexterity and an avoidance of lost time. In such cases a more moderate premium will suffice. Any attempt, however, on the part of the employer to be greedy and squeeze the lemon too dry will defeat its own object, since if a trifling premium be offered, the workman will not consider it worth while to exert himself for so small a reward, and the expected increase of output will not take place."

In regard to the workshops under Mr. Halsey's management—workshops, in which the work is "small and medium size machine-shop work"—while his men's

ordinary hourly time-wage is 17½ cents [8¾*d*], they get a premium of 5 cents [2½*d*], for each hour saved. Thus, if a workman is engaged on a job, the standard time allowance in respect to which is five hours, and if he gets the work done in four hours, he will get a premium equivalent to an addition to his ordinary wages at the rate of 7·14 per cent., while the labour-cost to the employers is reduced by 14·29 per cent. "Speaking broadly," Mr. Halsey says, "I should say that the average increase of output due to the system has been from 25 to 35 per cent., and the proportion of premiums has been such as to make the increased earnings for the workman rather less than one-half the saving to the company."

It will be obvious that the introduction of a system such as this of Mr. Halsey's is likely to meet with the smallest amount of difficulty in cases in which similar articles are made again and again, week after week; and, in fact, the whole of the work to which he has applied his Gain-sharing scheme has been "repetition work," while he has not attempted to apply it to other work "of too miscellaneous a character to enable the system to be used."

The second of the two systems of Progressive Wages, for a brief description of which space must be found here, is that in force since January, 1891, in the engine-works of Messrs. Willans and Robinson, of Rugby and Thames Ditton.* The general outlines

* For a full account of this system see the Labour Department *Report on Gain-sharing*, 1895, pp. 42-62 and 122-128.

of this system are as follows. In relation to all work done under the system a certain sum, termed a "reference rate," is fixed; if the amount earned on the job as ordinary time-wages (including overtime pay) falls below this reference rate, then the balance (*i.e.*, the difference between the actual cost in time-wages and the reference rate) is divided equally between the employers and the workman, or the group of workmen, employed on the job; the employees, that is to say, receive, by way of bonus, in addition to their time-wages, one-half of the amount by which the reference rate price exceeds the sum of these time-wages.* The reference rates, while being, as a rule, in excess of the normal cost of the job in time-wages, are stated to "vary from average normal cost to normal cost *plus* 10 per cent." It will be understood that the workman receives his time-wages in full in any case, even if they should amount to more than the reference rate.

In order to make clear the operation of this system, so far as concerns its effect in relation to the earnings of the workmen, on the one hand, and to the cost of the work, on the other, it will be convenient to assume, by way of illustration, a case in which this system is

* In the pattern-shop and the machine-shop each leading hand gets, in addition to any bonus which he may earn on his own work, 10 per cent. on the amount of the bonuses earned by the men working under him; so as to compensate him for time lost in supervision. The apprentices have their reference rates fixed at one-half the amount of the ordinary rates; their time-wages being, of course, much lower than those of the adults, their bonus balances would otherwise, it is considered, be unduly large.

adopted in regard to the work of a man previously employed on simple time-wages at 9*d* per hour and making normally one article per hour. The original labour-cost of this article being thus 9*d*, we will suppose that the percentage added to the "average normal cost" under the new plan is 5 per cent.; the reference rate of this article will accordingly be 9·45*d*. The results given by the application of this system of progressive wages will, under these circumstances, be as shown in the Table which follows.

Time occupied in making one article.	Increase in efficiency of workman.	Remuneration per article (piece-earnings).	Increase in rate of pay per hour (time-earnings).	Increase or decrease in labour-cost.
Minutes.	Per cent.	*d.*	Per cent.	Per cent.
60	*Nil.*	Wages 9·000 Bonus 0·225 Total 9·225	+ 2·500	+ 2·500
54	11·111	Wages 8·100 Bonus 0·675 Total 8·775	+ 8·333	— 2·500
48	25·000	Wages 7·200 Bonus 1·125 Total 8·325	+ 15·625	— 7·500
45	33·333	Wages 6·750 Bonus 1·350 Total 8·100	+ 20·000	— 10·000
40	50·000	Wages 6·000 Bonus 1·725 Total 7·725	+ 28·750	— 14·167
36	66·667	Wages 5·400 Bonus 2·025 Total 7·425	+ 37·500	— 17·500
30	100·000	Wages 4·500 Bonus 2·475 Total 6·975	+ 55·000	— 22·500

To put the matter in another way; if a job, which used to take five hours, is now done in four hours, the price of the hour saved will, if the basis adopted be such as we have supposed, be divided between the workman and his employers in such a manner that the man receives, by way of bonus, the price of $37\frac{1}{2}$ minutes, while his employers save the price of $22\frac{1}{2}$ minutes; if the job is done in 3 hours 20 minutes, the price of the 1 hour 40 minutes saved is divided so that the value of $57\frac{1}{2}$ minutes goes to the man, and the value of $42\frac{1}{2}$ minutes is saved to his employers; if the job takes 3 hours only, the employee receives a bonus equivalent to the wage of 1 hour $7\frac{1}{2}$ minutes, while the employers save the price of $52\frac{1}{2}$ minutes; if the job be done in one-half the original time, then the price of 1 hour $22\frac{1}{2}$ minutes goes to the workman, that of the other 1 hour $7\frac{1}{2}$ minutes saved being retained by the employers.

It should be explained that Messrs. Willans and Robinson apply this reference rate plan, for the most part, only to "standard" work, in which there is a great amount of repetition—engines of a special class which the firm has been turning out, year after year for some time, with little or no change in construction, and in the manufacture of which, moreover, the characteristic feature is the interchangeable nature of the different parts.* But the proportion of the company's total output which consists of standard work is large, and Messrs. Willans and Robinson are

* Thus, a trunk or a valve made for a 40-horse power engine will fit any and every 40-horse power engine turned out by the firm.

able to apply their Gain-sharing system to a great part of the work done in their factory. With respect to the results obtained under this system, the figures which follow (from *Labour Gazette*, June, 1896, p. 175) will be of interest.

RATIO OF BONUS TO TIME-WAGE EARNINGS.*

Trade. (1)	No. of men employed under Bonus System. (2)	Total Wages of the Men referred to in Column 2 (*including wages received in relation to work not done under Bonus System*). (3)	Wages received by the Men referred to in Column 2 *in relation to work done under Bonus System.* (4)	Bonus received by the Men referred to in Column 2. (5)	Ratio of Bonus to Wages. (6)
		£ s. d.	£ s. d.	£ s. d.	Per cent.
Grinders	6	458 18 9	90 15 5	34 15 2	38·3
Erectors	4	199 17 1	10 17 5	6 8 4	59·0
Turners	53	3,528 15 9	2,020 17 3	941 7 0	46·6
Fitters	9	915 2 11	231 2 6	87 16 10	38·0
Machinists	22	1,388 11 4	479 15 7	221 19 4	46·3
Labourers	3	213 19 2	15 13 7	16 15 3	106·9
Apprentices	5	164 6 4	35 12 3	17 11 5	49·3
Pattern Makers ..	14	968 0 10	581 9 11	183 12 11	31·6
Smiths and Strikers	2	218 5 2	4 0 4	7 1 3	175·8
Foundry	43	2,967 18 3	2,967 18 3	32 12 5	1·1
Total	161	11,023 15 7	6,438 2 6	1,549 19 11	24·1

* The figures relate to the wages and bonus of workmen only, and do not refer to foremen, clerks, timekeepers, storekeepers or draughtsmen. The Table deals with the bonus system so far as concerns the Works of Messrs. Willans and Robinson. The application of the reference rate plan in their Outside Department (in which the system is applied in a collective form) is dealt with in a subsequent chapter treating of collective progressive wages (*post*, pp. 139, 140).

With regard to the figures just stated it is to be observed that, while the workmen belonging to the first eight classes mentioned in the Table work, as a rule, "single-handed," and the reference rate plan is, in relation to their work, applied, for the most part, in an individual form, each reference rate price relating to an operation performed by a single man, this bonus system is applied to the two last classes of workmen (whose work is group work) in a collective form; and the case of the foundry will be dealt with later on when we come to consider the collective type of the Gain-sharing method. Turning, then, to the figures, so far as they relate to the first eight classes of workmen we shall see that these men have been able to earn under the Gain-sharing system bonuses constituting a very important addition to their ordinary wages, while reference to the illustrative figures given above (*ante*, p. 105) will show that this increase in the earnings of the workmen must necessarily have been accompanied by a most considerable saving to their employers.

With respect to the Gain-sharing scheme in force with Messrs. Willans and Robinson, certain points of detail require notice. In the first place, their scheme expressly states that "the reference rates once fixed, will be permanent, except where the method of doing the work is changed." This, it is submitted, is a provision of the first importance. For any system of bonus on output to be successful, it is essential that the workman shall feel certain that if, whether by increased exertion and carefulness, by discovering

improved methods of working, or otherwise, he can reduce the time necessary for the execution of the work confided to him, the rate of his premium will not on this account be lowered.* Another point, in which the practice of Messrs. Willans and Robinson is in accordance with the principles essential to the successful application of the Gain-sharing method, is that, in all cases in which this is practicable, the reference rate prices are explicitly communicated to the workmen before the work is commenced, this information being, as ought always to be the case,† given to the men without their having to ask for it. It is, further, a valuable feature in this Gain-sharing scheme that the reference rate applies to each job separately, so that if there be a "loss" on any given job (*i.e.*, if the cost in time-wages exceed the reference rate), this is not taken into account against the workman in relation to future jobs. Experience proves that every system, under which an adverse balance on one job has to be made good out of the "profit" on the next job, is intensely unpopular with workmen, and, moreover, that no such system is really advantageous

* It is submitted that in all cases in which it may be practicable, it would greatly add to the acceptability of a Gain-sharing scheme, if in fixing the prices the workmen could be consulted. Nor will it be sufficient to settle prices with the foreman, treating him as representing the men under him; for the foreman is rather considered by the men to represent the interests of the employers.

† Otherwise the workmen will very likely be afraid to ask for the information, suspecting that a man who exhibits too inquiring a mind may begin to find that his work is criticized with an unwelcome severity, and may even get his discharge.

to the employer, because no workman will do his best while disheartened with a burden of an accumulated balance of loss which must be worked off before he can again begin to earn bonus. Lastly, the premium under this plan is, wherever possible,* paid weekly, together with the man's ordinary wages. All available evidence demonstrates that, the smaller the interval allowed to elapse between the completion of the work and the receipt of the premium earned, the more likely is this reward to achieve its object in stimulating efficiency.†

In one important respect the experience of Messrs. Willans and Robinson is of special interest as tending to remove a doubt which might easily suggest itself—a doubt, whether the stimulus to rapid production afforded by a system of progressive wages of this nature may not militate against perfection of workmanship. For the engines manufactured by this company bear a well-established reputation for excellence of workmanship. No doubt, the tendency to scamping to a certain extent inherent in any bonus system of this type has to be guarded against by efficient inspection; and in this connection it is of interest to note the provision made by this firm with respect to the remuneration of those by whom the work of inspection is carried out. Their shop inspectors

* In the Foundry and the Outside Department of Messrs. Willans and Robinson, the bonus (which has been at a much lower rate than that earned in the other branches) is paid after the expiration of a more or less considerable interval; see *post*, pp. 138-140.

† Compare *post*, p. 124, 125.

get a specified percentage on the total amount of the bonuses received by the workmen in their respective shops, subject to a deduction from this premium of 2*s* 6*d* for every defect which they fail to detect and have remedied, and which may be discovered on subsequent examination, while for the stores inspector (who examines all articles as they are transferred from the shops into store) a certain specified amount is set aside each year; if he passes as perfect any article in which defects are subsequently discovered by the foreman of the erecting shop, then one-third of the expense incurred in remedying these defects is deducted from this premium. The truth is, that under whatever method of remuneration workmen are paid, strict inspection of their work is necessary; and the extra care, which has to be taken in inspecting work done under a system of bonus on output, is certainly not an insuperable objection to the adoption of a system of this nature.

One reason of much weight, which may be urged against the introduction of any system of progressive wages similar to those which have been described in this chapter, is that this method involves so large an amount of complicated book-keeping as to render its adoption difficult, if not impracticable. But it cannot be denied that accurate cost-keeping is well worth the trouble which it unquestionably entails. As a matter of fact, in many well-managed business concerns, in which no attempt is made to carry out any form of Gain-sharing, the labour-cost of every article is habitually checked with the most elaborate precision

at each stage of its manufacture, so that scarcely any addition to the work of the staff, by whom this cost is calculated, would be demanded, if it were determined to adopt some kind of Gain-sharing. Once established, the statistical system required for the application of this industrial method will prove of the greatest service, enabling a manufacturer by a reference to the entries in his books relating to past orders to fix speedily and accurately the price, at which he shall undertake the execution of any new order.

A question of great importance to employers, who may think of adopting a scheme of Gain-sharing, and to employees, to whose remuneration it may be proposed to apply this method, is this. If the workman gets his job done for less than its normal cost, what part of the saving effected is to be allotted to the employee by way of bonus, and what part shall be retained by the employer? Whether the employer shall offer to allow his men to keep the whole of the difference between actual and standard labour-cost, or, if not, what fraction of this sum he shall offer to them by way of premium, is a question which will, of course, be determined according to the circumstances of each case. There may be cases, in which an employer, who is anxious to reduce that part of his cost of production which is attributable to establishment charges (including interest on the capital sunk in plant, rent, &c.), may find it worth while to allow the workmen to pocket the entire "profit balance."* In other cases the employer will allot to his workmen, by way

* Compare *ante*, p. 72 *n.*

of bonus, a part only of this balance—a proportion sufficient to provide premiums of adequate amount to stimulate their efficiency in the degree desired.

On the other hand, from the point of view of the workman, it might be urged that a Gain-sharing scheme, which, if a man shall raise his efficiency above the normal standard by 50 per cent., offers him a premium equivalent to an addition to his normal wages of, say 33 per cent. and no more, is an arrangement by no means advantageous to the employee; and that he would do much better under the ordinary piece-work plan, under which a similar improvement in his efficiency would result in his earning the full time and a half (50 per cent. above his normal time-wages). But then, under the ordinary piece-work plan, is there not, in many cases, a probability that, after the workman had been making time and a half for a few weeks, his piece-price would be cut down on the ground of his "making too much money," and that the process of nibbling would go on until the employer found that the man was no longer able to make more than the permissible earnings, say time and a third, or time and a quarter? Would it not, then, suit the workman quite as well to work under a system, under which the employer tells you plainly that, if you can get the work done half as fast again as before, he means to have some part of the benefit of this improved production, states clearly what part he means to keep for himself and what you are to get, and, this being once arranged, sticks to his bargain?

CHAPTER VIII.

COLLECTIVE TASK-WAGE.

In regard to collective task-wage it will be necessary only to explain the sense in which this term is used. Work is performed under the method of collective task-wage in those cases, in which an employer agrees to pay to a group of operatives a remuneration consisting in a wage proportionate to the time occupied by the performance of their labour, with an agreement on their part that they shall perform within a specified period not less than a certain stipulated amount of work, that if they shall perform in this period less than this *quantum*, their employer shall have the right to make a proportionate reduction in their wages, and that, should this *quantum* be exceeded, he shall not be called upon to make any payment in respect of such excess.

CHAPTER IX.

COLLECTIVE PIECE-WAGE.

The method of collective piece-wage may be illustrated by the case of the operatives employed in the flint-glass trade. The peculiar features of the basis, upon which the rate of wages in this industry is reckoned, have been explained in a preceding chapter (*ante*, p. 27). There we examined the method adopted in the remuneration of a man working single-handed. In operations such as the making of wine-glasses, in which combined labour is required, the plan adopted is as follows:—The men work in a group called a "chair," composed of (1) a "gaffer" or "workman," (2) a "servitor," (3) a "foot-maker," and (4) a boy or "taker-in." The members of the chair are rated in proportion to the degree of skill demanded by the work allotted to each. Thus, in a chair, which I saw at work, the gaffer was rated (nominally) at 6*d* per hour, with the (nominal) condition, that the chair should produce six wine-glasses per hour, say, in fact, at the rate of 1*d* per wine-glass; the servitor was in the same manner rated at 5*d*; the

foot-maker at $3d$; and the boy at $1\frac{1}{2}d$. In each "turn" (*i.e.*, shift) of six hours this chair was actually making eighty wine-glasses, the collective remuneration of the group thus amounting to $17s\ 2\frac{2}{3}d$, out of which $6s\ 8d$ became due to the leading man (gaffer), $5s\ 6\frac{2}{3}d$ to the servitor, $3s\ 4d$ to the foot-maker and $1s\ 8d$ to the boy.*

It may be remarked, in passing that, as a rule, it will be found conducive to the acceptability of a system of collective piece-work to arrange that the lump sum paid to a group as collective piece-wage shall be paid to the different members of the group direct from the employer's pay-office,† being divided between the members of the group in such proportions as may be accepted by them as equitable—a proportion based upon the relative skill demanded by the work of each, and not upon any attempt to incite the leading man to hustle his mates into over-exertion

* As to the systems of collective piece-wage which obtain in the glass-bottle trade, see *Report on Wages and Hours of Labour* of 1894, Part II., pp. 210-220. As to various systems of collective piece-wage (in some cases called "fellowship") in factories under the War Office, see *Report of Committee on Manufacturing Departments of the Army*, 1887, pp. 88, 105, 128, 131, 184, 185, 305, 315, and 605. As to collective piece-work among agricultural labourers, see *Labour Gazette*, October, 1897, p. 301.

† What may happen if the entire sum is paid into the hands of the leading man of a group, for him to divide among its members, may be seen from the evidence of an engineering employer before the Labour Commission: "When the balance [*i.e.*, the excess above the men's rated time-wages on the job] was paid on the piece-work, we paid it to the leading hand of the gang, and we left him to divide amongst his mates; we found he did not divide amongst his mates;

by giving him an unduly large proportion of the collective wage.

In this connection it may be observed that, so far as concerns foremen and other superintendents of labour, it will generally be found a mistake to include in the piece-wage price of a job done by a group of workmen the remuneration of such officials. Theoretically, it is not altogether easy to understand why working-men so strongly object to an arrangement of this nature, at any rate in cases where the prices are based upon a scale sufficiently liberal to provide adequately for the remuneration of the foremen and superintendents as well as for that of the subordinate employees; but that workmen in general do very earnestly disapprove of this plan is certain. It may be a matter of sentiment; but workmen, as a fact, do not like any system under which, whether really or apparently, the remuneration of a foreman "comes out of their earnings," as they put it.*

consequently we said, 'We will have no more of this; we will divide this money up in the office *pro ratâ* to the men's wages; the leading hand is entitled to something for keeping the account, and we will give him that proportion.' I do not know the exact proportion which it worked out in; but somewhere about 7 to 8 per cent., I think, is about the proportion which we should give the leading hand for managing the work, and the other men would be paid *pro ratâ* to their wages" [*i.e.*, their rated time-wages] (*Evidence before Labour Commission*, Group A., Vol. III., p. 356).

* Thus, in a manifesto issued in August, 1896, Mr. B. Tillett, general secretary of the Dock, Wharf, Riverside and General Labourers' Union, complains that the employers are "forcibly extracting wages of *foremen*, *gangers* and odd-job men out of the collective earnings of the gang" (*Times*, August 28th, 1896).

The method of collective piece-wage offers special advantages in those cases in which it is difficult or impossible to measure the exact amount of the output of each man in a group separately and pay him according to the results of the labour which he individually performs, and also in cases in which, although it would not be actually impossible to price and pay for the output of each man separately, yet to do so would involve an undue amount of trouble.

One class of work, in regard to which collective piece-wage possesses marked practical advantage, is work which is done by men working in alternate day and night shifts. If you put the men on *individual* piece-wage, it is not improbable that the man, who works in the day-time, will, in the first place, be at no particular pains to leave the job in a condition making the work of the night-shift man as easy as possible, and will, in the next place, be likely to suggest, if any fault is found with the work, that the defect is due to the negligence of his successor; and *vice versâ* with the night-shift man. These difficulties are avoided by making the two men partners in the job.*

As an example of collective piece-work upon a most extensive scale may be cited the system introduced some years ago in the Royal Dockyards, under the name of "task-wage" (in cases in which the work was measured by the foot, &c., or counted), or "tonnage" (in cases in which the amount of the work

* Compare *Report of Committee on Manufacturing Departments of the Army*, 1887, p. 88.

done was fixed by the weight of the material put into a ship). It should be explained that the account of this system which follows, and which is given by way of illustration, is repeated from the earlier editions of this book, and describes the system as the writer found it in force in 1891, but is not intended to represent existing facts, the methods of remuneration in force in these Dockyards having, as will be explained later, since been changed in important respects.

The size of some of the groups of workmen employed under these arrangements is very large. thus, in connection with one ship I saw a group of 390 men working on collective piece-wage, the group including, not alone the workmen engaged in the building of the vessel, but also men in the machine-shops preparing the material; thus, a man punching holes in a plate with a punching-machine was employed on tonnage jointly with the riveters, &c., working on the ship. Some of the groups are much smaller. I saw two sets of thirty men each, one on each side of a cruiser's bottom, into which new bolts and planks were being put at so much per dozen bolts and so much per dozen planks; groups of ten to twelve men each, moving timber (with horses) from one part of the yard to another at so much per cubic foot; sets of four and of three smiths, and a set of two sawyers, working together in the same manner. On the other hand, I was informed that in some cases a group consisting of as many as six hundred or even seven hundred men is employed on collective piece-wage.

Every man is separately rated at a certain rate per day, and the lump sum paid for the joint work of a group in respect of a given job or quantity of work is divided by the Admiralty officials between all the members of the

group, in proportions corresponding, with approximate accuracy, to the different rating of each.

The application of the method of collective piece-wage in the Dockyards is of recent introduction, having first been adopted about four years ago,* and its results are considered by the officials to be satisfactory. The workmen engaged on different ships in course of construction were said to earn an excess over their rated day-wage at the rate of 6 per cent. in one case, 20 per cent. and 25 per cent. in others, the higher rates prevailing in the cases of ships whose construction has been recently commenced; while the ships are said to be built on the average in 25 per cent. less time, and at 25 per cent. less cost than formerly. I was told that, when the *Impérieuse* was half built, the tonnage and task-work system was introduced, with the result that the men earned 28 per cent. more than they had formerly earned when on time-wage, and the labour-cost was 50 per cent. less than for the first half of the ship.†

On the other hand, the workmen have, in many instances, viewed the new system with much disfavour; and it is undoubtedly open to criticism on some points. One valid objection to this task and tonnage plan, especially when applied on a very large scale,‡ is that it has too much of a "pay as you please" character (see *ante*, p. 74), there being nothing in the nature of a real agreement between employer and employed as to the standard of remuneration. In other words, there is nothing to show

* *I.e.*, about 1887; the first edition was written in 1891.

† See *Evidence before Labour Commission*, Group A., Vol. III., p. 367.

‡ In the case of a small job, the workmen, to whom—I was informed—the total lump sum allotted for the work is, if they wish it, communicated, could reckon what the job would "work out at," and ascertain the standard of remuneration adopted; this it is obviously impossible for them to do in the case of a large job.

the workman that he is not "doing sixpennyworth of work for fivepence." The officials frame the estimate of the total cost of a ship, an estimate which, of course, includes a certain amount in respect of the cost of labour. The work done each week is measured up, and compared with the total quantity of work which has to be put into the ship. This ratio being thus established, a more or less exactly proportionate part of the total amount of the estimated labour-cost is divided up between the men in the group. It occurs sometimes that the officials find that the money is going too fast: in that case the weekly pay is reduced; but the men never—I was informed—get less than their rated day-wage, and, taking one week with another, generally earn a good deal more. How far the excess over the rated pay corresponds with the excess over normal speed in working displayed by the workman, it would be difficult to say.* In fixing the estimated labour-cost of the ship—the total lump sum out of which the piece-wage is, week by week, paid to the men—the officials have to take into account a variety of considerations. The ship must be built as cheaply as may be; if at all possible, the cost must be lower than that of a similar vessel built in private yards. Thus, a strong temptation exists to cut the estimate for labour down to the lowest point. And, as a matter of fact, when task-

* Some of the jobs done under the tonnage system lasted, with interruptions, for several months; in a case like this, Mr. Williamson, Director of Dockyards, told the Labour Commission, "the only thing you can do would be to pay the men a little over day pay, but you have to be so cautious with this tonnage system not to pay them too much, because there would be no getting it back, and the work being incomplete, the officers have to estimate how much they think they can afford to pay the men over and above their day-wages afterwards, when the job is completed. That is a very unsatisfactory system as regards the men" (*Evidence before Labour Commission*, Group A., Vol. III., p. 373).

work and tonnage were first introduced, the estimate of labour-cost was (inadvertently, no doubt) fixed far too low—so low, indeed, that the men in one yard, at any rate, did not even earn the equivalent of their rated time-wage. Probably these men, as soon as they were put on piece-wage, worked 20 per cent. faster than formerly; and, when they found that they did not even make their regular money, great discontent naturally arose. I was told that the estimates for labour-cost are now on a much more liberal scale. Be this as it may, it is obvious that the system here referred to, although it possesses considerable merits, and may, if a liberal basis be adopted, be free from any tendency to promote the under-payment of the workers, yet exhibits this notable defect, that under this method the ratio between work and pay is not established by express agreement between master and man.*

A second objection, which might be made to the method of industrial remuneration adopted in this instance, arises from the fact that the rate of piece-wage earned in each case does not depend entirely upon the greater or smaller degree of activity exhibited by the ordinary workman, but is to a large extent dependent upon the greater or smaller degree of intelligence exhibited by the foremen ("charge-men," &c.), who, by making proper arrangements, having the stuff ready when and where it is wanted, and so on, can do a great deal to expedite the

* "Complaints were made before the Commission that men were working on tonnage work without knowing the price to be paid. That was a just complaint on the part of the men. Some time ago they were put upon tonnage work without being able to accurately know what wages they were likely to earn from it, but now they get that information"; evidence of the Right Hon. Sir A. B. Forwood, M.P., then Financial Secretary to the Admiralty (*Evidence before Labour Commission*, Group A., Vol. III., p. 367).

progress of the work. Now, in the Dockyards all foremen and other superintendents of labour are remunerated solely by a fixed time-wage, and have no direct pecuniary interest in making the best possible arrangements for expediting progress. How far it would be possible to avoid this defect, it is not easy to say. On the one hand, it is unfair that a group of men, who have been working 20 per cent. above the normal speed, should find that, owing to the negligence or unskilfulness of the foremen, they only receive 6 per cent. above their rated time-wage. On the other hand, if the foremen were to be supplied with a direct pecuniary incentive by being included, together with the ordinary workmen, in the group working on task or tonnage, then there would arise the very grave danger that these superintendents might be tempted to hurry on the work, regardless of its being scamped, and even to deceive their superiors, where possible, as to the amount of work done.

In the last place, it must be pointed out, from the point of view of the employer, that the method of collective piece-wage cannot be expected to improve output to the same extent when applied to very large groups, as it does when applied to smaller bodies of workmen. The striking economic merit of collective wages is the manner in which this method promotes exertion, every member of the group encouraging every other member to do his best in order that the joint earnings may be as high as possible, and the less zealous finding a constant stimulus in the activity exhibited by their more energetic neighbours. But it is clear that, the larger the group, the less effective is the operation of this stimulus. The men working at one end of a big ship do not see why they should work specially hard for the benefit of the men at the other end, who may, for all they know, be "lazying." The man punching holes in the machine-shop feels no solidarity with the riveters

at the ship a quarter of a mile away. And in these large groups of two hundred, three hundred, or even six hundred men, each individual thinks, as a rule, that it does not much matter whether he works hard or "mikes," since his particular efforts can produce only a quite imperceptible and insignificant effect upon the total result. It is certainly in connection with smaller groups that we find the greatest degree of economic advantage produced by the method of collective piece-work.

The remarks, with which the account just set forth conclude, appear to be borne out by the opinions expressed, in his evidence before the Labour Commission, by the Right Hon. Sir A. B. Forwood, M.P., then Financial Secretary to the Admiralty: "There are two classes of piece-work adopted, one which we may call 'task and job,' as it may be termed, and that is regulated according to the quantity and number. The men are paid according to the quantity or amount of work done. The other system is the tonnage system. On that they are paid according to the weight of material worked into the ship. The tonnage system has been quite an experimental one, and I am bound to say that it has not succeeded to the extent that the officers of the Dockyard hoped it would. It was based upon the completion of so large an extent of tonnage, so large an amount of material, that it required so many men to be employed upon it, that the individual man's own personal exertions were rather lost in that of the aggregate, and therefore the incentive to his work is not as great as where he works with a smaller number of men, and where

he can get the result of his labour at an earlier date than he can where he works up such a large number of tons into a ship."*

From the evidence given before the Select Committee on Government Contracts in June, 1896, by Mr. James Williamson, Director of Dockyards, it appears that the system of remuneration, to which attention has just been called, had, before that date, been abandoned.†

Speaking broadly, it may be said that, though under certain circumstances the method of collective piece-wage is preferable to individual piece-work, yet experience shows that the best results are obtained where it is possible to pay each man according to the results of his own labour. As is pointed out in an official memorandum on the piece-work system in operation in the Royal Carriage Department, the system of collective payment by results is defective in the nature of the stimulus to exertion which it provides, "because the busy man knows he will not get the full benefit of his greater activity, and the idle man is encouraged in his idleness by the knowledge that he will have his equal share of the total

* *Evidence before Labour Commission*, Group A., Vol. III., pp. 366, 367; see also p. 374.

† "The task and job system is only now used in the yard when we are trying to frame reasonable rates, what I call the scheme of piece-work rates. . . . I may say that the tonnage system has disappeared," *Report from the Select Committee on Government Contracts* (*Fair Wages Resolution*), 1896, p. 56]

earned by his branch or his shop, whether he exerts himself or not."*

* *Report on the Manufacturing Departments of the Army*, 1887, Appendix xxxi, p. 605. In this Report it is stated that "in cases where several men are employed on a job, the system of fellowship [*i.e.*, collective] piece-work is adopted, but individual piece-work is applied wherever it is possible to do so" (p. ix.).

CHAPTER X.

COLLECTIVE PROGRESSIVE WAGES.

UNDER the method of collective progressive wages the joint labour of a group of persons is remunerated in part by a fixed or *minimum* wage, in part by a bonus proportionate to the efficiency of this labour. As an illustration of the application of this method in a manufacturing industry we may take the "preparers" in a woollen yarn factory, whom I found working in sets of four. Each of the women in these groups was in receipt of a weekly wage of 11*s* 1*d*; the output of each set was measured each week, and, if it were found to exceed a specified standard, the excess entitled the set to a joint premium, divided between the members of the set in such proportions as the firm considered just. From the books it appeared that in the preceding week the A set had earned a premium of 6*s*, the E set one of 5*s*, the J set one of 5*s*, while the L set, having produced less than the standard output, earned no premium. The premium had been divided equally between all the four members of the A set and of the E set; but in the case of the J set the 5*s* had

been shared in equal halves by the two adult members of the set, the others being young and inefficient hands, and, therefore, held by the firm not to have contributed to the result of the week's working further than to the extent of the standard output.

Many other instances, in which a group of employees divide between them, in proportions fixed by their employer, an addition to their wages dependent upon the fact of their joint labour exceeding a specified standard of efficiency, might be cited. Here, for example, is an extract from the rules of a Devonshire paper-mill in relation to the work of twenty-eight operatives: "Tonnage-money will in future be paid on the weight of (good) paper made in excess of 108 tons per month, and if in any month the weight made is under 108 tons, the deficiency will be carried forward against the following month." Again, in a match and taper-making factory, where the women work in sets of three, the plan laid down was that the leading member of each set (the platewoman) should receive "15*s* per week for eleven drums, and 1*s* for every extra one," while the subordinates (drumwomen) would "get 10*s* per week for eleven drums, and 1*s* for every extra one" (*Star*, November 15th, 1890). Another example of collective progressive wages is to be found in the glass bottle industry, as carried on in some districts,* where the groups of workmen em-

* *E.g.*, in Lancashire, and in the North of England, with the exception of Blaydon; see *Report on Wages and Hours of Labour* of 1894, Part II., pp. 214, 215, and *Fourth Annual Report on Changes in Wages and Hours of Labour* for 1896 (1897), pp. 256, 257.

ployed get a fixed weekly rate of wages, and, in addition, are paid for "over-work," *i.e.*, receive a piece-price for all bottles produced in the week in excess of a certain specified number.

The method of collective progressive wages appears to be applicable with advantage in cases in which machinery run by steam or other power is used by groups of operatives; for in these cases it is possible for a set of workmen, by exhibiting due diligence and by "working-up to each other" in a loyal and intelligent manner, and without in any way over-straining their faculties, considerably to increase the output. To exemplify the value in this respect of the method now under consideration the facts in relation to its operation in the factory (producing oil-cake for cattle) of the Agricultural and Horticultural Association will be stated. Each of the two presses is worked by a set composed of a head press-man, an assistant press-man, and two boys, all of whom receive, in the first place, fixed time-wages. In relation to each press (the two having different capacities) a standard weekly output is fixed; after that limit is passed, the operatives receive a premium of 1*s* 6*d* per ton on the first three tons produced in a week in excess of the standard, and of 2*s* 6*d* per ton for every additional ton produced. This joint premium is divided between the set in proportions established by the employers. Before this system was introduced, the output had been very unsatisfactory, in part because the men employed, having been accustomed to work up a different material—a material

which it is impossible to get through the machines at as fast a rate as that used in this factory—altogether failed to make the most of the power of the machinery. In the first month after the premium on production was offered, the output of the press (they had only one press at this time) rose from 26 tons per week to 31 tons; after six months the output was 52 tons, after ten months it reached 57 tons, and has since been maintained at this figure. The second press, added subsequently, began with an output of 48 tons, which by the end of a year was brought up to over 76 tons a week. Mr. E. O. Greening, the Managing Director, has stated that "the men and boys have raised their earnings from an average of £1. 0*s* 7*d* per week to an average of £1. 6*s* 8*d*, and for the Association have converted a loss into a profit." * In this instance (as is also the case in the paper-mill above mentioned) the employees, in addition to their premium on production, receive a fixed share in the profits of the factory—a point of importance, because it is upon their having an interest in maintaining the good name of the Association amongst its customers that, as Mr. Greening states, reliance is placed in order that the tendency to obtain quantitative, at the expense of qualitative efficiency of production, which is inherent

* *Co-operative News*, August 22nd, 1891. Taking the two presses together, the ratio of premium on output to fixed wages during the twelve months ending July 31st, 1891, was 11·7 per cent. It is worth noting that this system tends to the elimination of inefficient workers. It is, of course, to the interest of each man in the set to see that all work hard; and any incapable or idle man is promptly reported and discharged.

in this system of progressive wages, may be counteracted. To show the working of this compound scheme of progressive wages *plus* Profit-sharing, the average weekly earnings during the twelve months ending July 31st, 1891, of one of the head press-men (overtime excluded) are subjoined.

Fixed weekly wage . .	£1	12	0
Premium on output . .	0	4	7
Bonus (share in profits) .	0	2	9
Total weekly earnings	1	19	4

Turning from manufacturing to other branches of industry, we find the method of collective progressive wages frequently adopted in our business houses in relation to salesmen, clerks, &c., these employees getting a bonus proportionate to the turnover (that is to say, proportionate to the sales, irrespective of the rate of profit earned by these sales). In some cases this bonus is contingent upon the amount of the sales effected in a certain department, and is divided among those employed in that department; in others, the entire staff of the house forms the group-unit.*

* A system of collective progressive wages in force in certain docks owned by the East and West India Dock Company was explained to the Select Committee on the Sweating System in the following terms:— "A standard cost per ton is taken; we will say that the discharge of a cargo costs 6*d* per ton, and in that 6*d* per ton would be included the superintendent's salary, stores, almost everything that would affect the docks. Take the case of discharging at 6*d* per ton, if owing to economy or harder work, the cost during any given time was 5½*d* per ton, there would be a saving of a halfpenny; this halfpenny would be

It may be of interest to note that in some cases, in which the different departments of a firm carry out separate parts of the work done by the house, each part being a fraction of a complex succession of processes required to be performed before the finished product is ready for sale, the method of collective progressive wages may be adopted in a special form. Suppose, for instance, that the firm (i) manufactures paper, (ii) prints books, and (iii) publishes those books. In this case the printing department will be debited with the wages of its own staff, with the cost of materials, &c., used by it, and with interest on, and depreciation in respect of the capital sunk in its plant and premises, and will, in its turn, debit the publishing department with the value (*i.e.*, the estimated market price) of the printing done by it, the accounts of the other departments being kept upon a similar basis; while of the profit balance shown in the books of each of these inter-linked departments a definite part is assigned to the persons employed in that department by way of bonus on efficiency.*

One matter, which should not escape the attention of an employer, who wishes to adopt a system of

multiplied by the number of tons discharged during the period under consideration, and 25 per cent. of that result would be given to the staff; therefore the Dock Company would have saved 75 per cent. of a certain amount" (*Evidence*, Vol. II., p. 324).

* Irrespective, of course, of the rate of profit realised by the firm. Thus, in the case above supposed, the employees of the printing department might, by working with zeal and intelligence, earn a high bonus in a year in which the firm, owing to trade depression or for other reasons, earned exceptionally low profits.

this nature, is the danger which exists of inconvenience caused by rivalry between the various inter-dependent departments of the business. Thus, in a large firm, which formerly practised this method, it was found that the printing department, for example, did its best to over-charge the publishing branch for work done for it. However, I have been assured by M. Edgard Laroche-Joubert, the head of the celebrated *Papeterie Coopérative* at Angoulême,* who has great experience in this matter, that it is perfectly possible to avoid all difficulties of this nature by referring the question of the price to be charged by one department to another to the heads of the business for final decision.

In regard to all forms of collective progressive wages one very important point to observe is the proportion in which the joint premium is divided by the employer among the different members of the group by whom it is earned. (A.) The joint premium may be divided among all the members in equal shares, or (B.), the premium may be divided between the members of the group in accordance with the importance of the services rendered by each; in some cases the ratio of the respective fixed or *minimum* wages of the members is taken to be the measure of the importance of the work done by each, some claim to an extra share in right of length of service being also not infrequently recognised; in other cases the employer makes his own estimate of the relative importance of the services rendered by the different

* See Gilman *On Profit-sharing*, pp. 106, *et seq.*, and the Board of Trade *Report on Profit-sharing*, 1891, pp. 8, 9.

members of the group, and fixes the share of each in accordance with that estimate. It should be remarked, that the importance of the services rendered by the leading member of a group frequently depends upon the amount of pressure, which he is able to exercise upon his subordinates with a view to securing intensity of exertion and a proper degree of carefulness on their part. Or, lastly (C.), the employer may allow the principal member of the group to take the whole of the premium to the exclusion of the subordinates.*

Speaking with special reference to the methods of division B. and C. just described, it is to be noted, that, from the moment that an employer accords to the leading member of a group a much larger share in the premium than is taken by his fellow-workers, at once a special feature is introduced capable of producing peculiar and, in many cases, most objectionable results.

For the head of a group of workpeople employed under these circumstances, naturally anxious that the premium on output shall be of large dimensions, is under a powerful inducement to secure the utmost possible speed in working, and may be tempted into bullying his subordinates into the exhibition of a quantitative efficiency of labour purchased at the sacrifice of their reasonable comfort and even of their health.

The best illustration, which can be given, of this

* For an example of this form of collective progressive wages see *post*, pp. 169, 170.

obnoxious tendency of the method now under discussion is afforded by the system of "piece-work", as it was in force in certain of the metropolitan docks prior to the Dock Strike of 1889. The labourers employed under this "piece-work" system were paid a fixed wage of 5*d* per hour from 6 a.m. to 6 p.m., with an extra 1*d* per hour for overtime. A rate per ton was decided by the dock officials to be the proper standard labour-cost in each case. This rate, multiplied by the number of tons, which the holds of a vessel were supposed to contain, gave the total estimated labour-cost of discharging her cargo. The actual sum paid away as the fixed time-wages of the men employed in clearing the ship being deducted from the total estimated labour-cost, the difference, if any, was divided between the men as "plus." This system was unpopular for many reasons. The men were ignorant of the basis of the calculation, and alleged that the standard labour-cost was fixed constantly lower and lower; so that "sixpennyworth of work" was a constantly increasing quantity. They had no means of knowing the number of tons comprised in a given job, and alleged that the company's officials often calculated the labour-cost on a false basis, reckoning the number of tons as smaller than it was in fact. The dockers always thought that they were entitled to a plus; but they often got none, or a far smaller plus than they had calculated upon receiving. But, in addition to these complaints as to the general working of the system of remuneration in force in this instance, there was one special feature,

which did much to give to it a character of grievous oppression; this was the method adopted in the division of the plus. The leading men (the "ship-workers" and "quay-workers") received a share of the plus either four or three times (according to the nature of the work) as great as that of the ordinary labourers. These leading men were thus clearly under a strong inducement to bully their subordinates to an intolerable extent; and the reader will now understand on what grounds the dockers, as those who followed the course of the negotiations between the Dock Companies and the strikers, which preceded the conclusion of the dispute, will not fail to have observed, firmly insisted that the division of the plus should, in future, be an equal division between all the members of each gang—a concession, which the companies at last very reluctantly consented to make.

Assuming that in applying the method of industrial remuneration now under consideration due provision be made to guard against dangers and difficulties such as those just indicated, there can be no doubt that the system of collective progressive wages possesses noteworthy economic advantages. Since, however, considerations of space compel brevity, the reader who desires to study in detail further examples of its practical operation must be referred to the Labour Department *Report on Gain-sharing*, already mentioned. But with regard to the "Gain-sharing" system of the Yale and Towne Company, manufacturers of locks and cranes at Stamford, Connecticut, to the application to group labour of the Reference

Rate plan of Messrs. Willans and Robinson (see *ante*, pp. 103-111), and to the very elaborate "Good Fellowship Scheme" in force since September, 1891, with the Thames Ironworks and Shipbuilding Company, Limited, a firm carrying on at Blackwall a large shipbuilding and general engineering business, and employing from a *minimum* of about 1,500 to a *maximum* of about 3,000 persons, a few observations will be submitted.

The Gain-sharing system was introduced in the Yale and Towne Works in 1887, its leading features being briefly as follows:—The cost of the product in labour, supplies, and material having been ascertained, the workmen were told that, if the actual cost came out at less than this standard price, the difference should be shared in stipulated proportions between them and their employers. This bonus was offered to groups of men, each consisting of some twenty operatives, and was payable at the end of each year. However, after five or six years the Gain-sharing system was abandoned,* and the men were put on *individual* piece-work. Among the principal reasons for this change stated by the employers are the remoteness of the reward, which was found inadequate as a stimulus, and the collective character of the Gain-sharing system ("experience in both has proved that [individual] piece-work is more profitable in our business, probably owing to the fact that in

* Except in the case of two groups in which individual piece-work would involve practical inconvenience, it being difficult or impracticable to measure up and pay separately for the output of each man.

[individual] piece-work the workman must depend entirely upon his own efficiency, while in collective work he may believe, or at least hope, that his fellow-workmen will do it for him.") *

The method adopted in regard to the work done in the Foundry of Messrs. Willans and Robinson is as follows:—By comparing the total amounts of the wages (time-wages) paid to the workmen employed in the foundry, less the value of "wasters" (articles useless owing to defects), it was found that the production of good castings to the value of £1 had cost in wages, on the average, a certain sum. On the introduction of the bonus scheme, the reference rate was fixed at this sum *plus* about 10 per cent., the arrangement being that, if the cost of the output of the Foundry in wages, per £1 value of good castings, be less than this reference rate price, then the balance shall be divided, as bonus, equally between the company and the workmen employed in the Foundry, each man sharing in the bonus in proportion to the amount of time-wages (overtime pay included) which he has earned in the month. It is to be observed that for the first four years after the introduction of the Gain-sharing scheme the workmen in the Foundry did not succeed in earning any bonus, and in 1895 (as the figures stated at p. 107, *ante*, show) they earned a bonus at the rate of only 1·1 per cent. on their time-wages. This ratio of bonus to time-wages compares very unfavourably

* *Report on Gain-sharing*, 1895, p. 23; in this Report the circumstances, which led to the abandonment of the Gain-sharing system in the Yale and Towne Works, are explained in detail.

with that of the bonuses earned by the workmen employed single-handed (*e.g.*, pattern-makers, 31·6 per cent.; fitters, 38; grinders, 38·3; machinists, 46·3; turners, 46·6); and it is of interest to inquire what are the reasons to which this fact is due. One reason appears to be that the Foundry was much less well installed than the other branches of the works, the appliances in use there being less efficient than in the other departments, and the premises neither adequate nor convenient. Another reason would appear to be that the bonus is paid monthly, instead of weekly as in the other shops, and accordingly affords a less vigorous stimulus. But the principal cause of the incapacity of the workmen in the Foundry to earn a good bonus is, according to the opinion of the works manager, to be found in the fact that in this case all the forty odd men here employed work together as one group, the bonus being reckoned on their aggregate output—an arrangement which this gentleman considers ill-adapted to promote that special efficiency which it is the object of the Gain-sharing scheme to evoke, since, while the less industrious among the members of this comparatively large group leave it to their more energetic mates to exhibit any special degree of efficiency, these workmen do not care to put forth their best energies with the knowledge that their own extra zeal is likely to be, to a great extent, neutralised by the inactivity of their fellow-workers.

With respect to the arrangements in force with Messrs. Willans and Robinson in relation to the work of their Outside Department (the whole of which is

done under the bonus system, and which consists partly of overhauls, but mainly of the unloading and erection of engines), it should be noted (1) that almost all of the work done in this department is done by men working together in small groups, (2) that the bonus is paid quarterly as to over-haul jobs, and as soon as the work is passed, so far as concerns the other jobs (though in this case instalments on account of bonus are sometimes paid as the work proceeds), and (3) that the addition made by the bonus to the men's time-wages, although considerably greater than in the case of the Foundry, is very much smaller than that made by the bonus earned in the departments in which single-handed work prevails, the bonus paid in the Outside Department having been in 1895 at the rate of 3·8 per cent. on the wages of the employees* (*Labour Gazette*, June, 1896, p. 175).

The scheme of Collective Gain-sharing in operation at the Thames Ironworks is of particular interest by reason both of its peculiar features and of the circumstances under which this system of progressive wages is applied.† The lines, upon which this scheme is framed, are noteworthy, because the plan adopted is that, if the actual cost of the work in time-wages comes to less than the standard labour-cost, the group, by which the work is done, receives by way of bonus, not a part, as is commonly the case, but the

* The ordinary workmen, excluding foremen, clerks, timekeepers, storekeepers, and draughtsmen.

† For a full account of this system, see *Report on Gain-sharing*, 1895, pp. 63-112 and 129-132.

whole of the difference between the actual and the standard costs. As to the circumstances, under which the Gain-sharing system has been adopted in the present instance, these appear to be about as unfavourable to its success as can easily be imagined. For in this case that requirement generally found essential to the successful application of the method of Gain-sharing —the preponderance of "repetition" work—is conspicuously absent. And while infinite variety is the rule in the work done in this yard, the large size and complex character of a great part of the output, including vessels of upwards of twelve thousand tons, must greatly add to the difficulty of fixing in a satisfactory manner the standard labour-costs on which the system is based.

As bearing upon the results attained by the introduction of this system of Collective Gain-sharing, the Table set forth on the next page, which is based upon the details given in the Labour Department *Report on Gain-sharing*, and shows the ratio, which the bonus earned in the different departments has borne to the time-wage earnings of the workmen, contains details of interest.

The figures stated in this Table relate to each department, as a whole; the *Report*, from which they are taken, gives the figures also for the different classes of workmen in each department, together with a minute examination of the method of grouping adopted in each branch. For these particulars space cannot be found here. It is, however, proper to point out that the general conclusion arrived at is, that the best

Ratio of Bonus to Time-Wage Earnings.

Department.	Time-wage Earnings.	Bonus.	Ratio of Bonus to Time-wage Earnings.	Period to which the figures relate.*
	£ s. d.	£ s. d.	Per cent	
Shipbuilding ..	74,815 18 11	5,341 16 0	7·26	Jan. 1892 to Dec. 1894.
Civil Engineering	39,835 2 1	1,516 7 11	3·81	March, 1892 to Dec. 1894.
Engineering ..	33,604 16 2	1,231 6 0	3·66	Jan. 1892 to Dec. 1894.
Forge (*now closed*)	14,036 8 7	1,042 5 6	7·43	Oct. 1891 to April, 1893.
Dry Dock	4,105 19 8	224 6 11	5·46	July to Dec. 1894.
Total	166,398 5 5	9,446 2 4	5·68	

work has been done and the biggest bonus earned by the smallest groups.

The nature of Collective Gain-sharing having been sufficiently illustrated, it remains to consider what are the cases, in which this method, as distinguished from the individual type of the Gain-sharing system, is suitable for adoption. In certain cases, in which the work is done by a number of men between them, each working up to the other, it is practically impossible to ascertain in what proportion each man has contributed to the joint output; and here the adoption of Collective, rather than Individual, Gain-sharing

* The Gain-sharing Scheme was adopted gradually, being introduced in the Civil Engineering Department in September, 1891, in the Forge Department at the beginning of October, 1891, in the Engineering Department in December, 1891, in the Shipbuilding Department and in the smiths' shop attached to that department in January, 1892, and in the Dry Dock Department in July, 1894.

is inevitable. In other cases, although it cannot be said that the separate measurement of the work done by each man is impossible, yet, as is especially the case where the work is large and complex, and where there is little or no "repetition," this measurement could be carried out only by the expenditure of an intolerable amount of labour; in such cases, accordingly, it will be best to make the group-unit consist of a number of men performing a series of operations, which are, for the calculation of the bonus, treated as a whole. An incidental advantage claimed for the collective system is that it tends to the avoidance of the friction arising from complaints of unfair pricing. Do what you will to secure that all jobs shall be priced on an uniform basis, it will be found impossible to escape making occasional, probably frequent, mistakes. But suppose that it were possible to secure that the price of each operation shall be fixed in exact proportion to the amount of labour normally involved in its performance, there still remains the difficulty that prices perfectly fair under normal circumstances may be grossly unfair if applied to work done under abnormal conditions. For it is obvious that, as between two men of equal efficiency and activity performing absolutely identical operations in respect of which one and the same standard cost is fixed, if one man's work has to be done under circumstances of greater difficulty than that of the other (as, for instance, in a cramped corner of a ship), it may well occur that, while his neighbour makes a big bonus, the man on this "awkward work"

may, through no fault of his own, fail to earn any bonus at all. Any unfairness of prices of the nature here indicated will, it is claimed, be obviated under a system, under which the separate jobs done by the different members of a group are pooled, all alike sharing in a collective bonus, the amount of which will depend on the net "gain" shown in relation to the sum total of the operations carried out by all the men in the group, taken together.

With respect to all schemes of Collective Gain-sharing, the determination of the composition of the various groups is a matter of importance. In determining who shall be the persons to be comprised in the group, to whom the collective bonus on output is offered, it must be borne in mind that, since the correct determination of the standard labour-costs is essential to the success of the system, and since in fixing costs a great amount of reliance is, in most cases, necessarily placed upon the opinion of the superintendents of labour, it will generally be advisable not to include in the ordinary groups persons occupying positions of this nature, who, if so included, would be placed under a strong temptation to over-estimate the normal cost of production, but rather to provide for them a bonus of a special and separate nature. So, again, as to those persons whose duty it will be to inspect the work, for the purpose either of testing its quality or of measuring its quantity; all such inspectors ought, it is submitted, instead of sharing in the general bonus offered to a group, the amount of which they might unduly increase by passing faulty

work, by measuring work inaccurately or in other ways, to have assigned to them separate premiums, the amount of which should depend on the degree of skill and care displayed in the performance of the special duties which these officials are called upon to perform.* In cases, in which several foremen have to work up to, or otherwise co-operate with each other, it may be found best to arrange that these officials shall share in a joint premium. Thus, under the Gain-sharing scheme of Messrs. Willans and Robinson the works manager and the foreman of the machine-shop participate in a bonus calculated in the following manner. For each article a "receiving rate" is fixed, this sum representing its estimated cost of production (including labour, materials, and establishment charges). From this standard price is deducted the actual cost of the article, and of the balance then left the works manager and the foreman of the machine-shop each receive a specified share by way of bonus. Similarly, in the case of the foreman of the machine-shop and the foreman of the erecting-shop, an "erecting-shop date" is fixed in relation to each engine; if the engine is ready for steam by the date named, then a specified sum is divided equally between

* With regard to special bonuses for inspectors, note the provision made under the Gain-sharing scheme of Messrs. Willans and Robinson (*ante*, pp. 110, 111). Where a foreman shares in the general group bonus, he may either take a *pro ratâ* share along with the subordinate operatives, or (a plan sometimes recommended) may have allotted to him a separate fraction of the bonus fund, or his bonus may consist, in part of a specified fraction of the fund, in part of a *pro ratâ* share along with the men working under him.

these two foremen; but for every day that the completion of the engine is delayed beyond the "erecting-shop date," a specified sum is deducted from this joint premium (so that, if the engine be one week late, the deductions will have swallowed up the entire premium). In their Outside Department Messrs. Willans and Robinson arrange that the principal officials shall each take a specified share in the balance left after deducting from the aggregate value (*i.e.*, price charged to customers) of the work done in this department the actual cost of labour, materials, and establishment charges (but not interest on capital).

So far as concerns the composition of the groups of workmen under a scheme of Collective Gain-sharing, it will be found advisable to avoid making the size of these groups larger than the practical necessities of the case require. For in regard to this method, no less than to that of Collective Piece-work (see *ante*, pp. 124-126), experience proves that any method of payment by results, applied to the work of a group, is most likely to be successful, if that group be small, rather than large. This is a point of no little importance, but which, since the matter was fully dealt with in regard to Collective Piece-work, does not call for further observations in this place.

CHAPTER XI.

CONTRACT WORK.

In the case of collective progressive wages, as we have seen, the lump sum paid as the remuneration of the joint labour of a group is divided in such a manner, that, while all its members, whether principal or subordinate, receive, in the first place, a fixed or *minimum* wage, all, or some of them receive, in addition, a premium calculated in proportion to the efficiency with which that labour has been performed. Contract work, with which we deal in this chapter, is work performed under an arrangement, by which, while the subordinate workers receive a fixed time-wage, the principal member or members of the group, have no right to any fixed or *minimum* wages, but draw the whole of their remuneration from the balance which remains after deducting from the lump sum paid for the execution of the work the total amount of the aggregate fixed wages of the subordinates. Thus, the remuneration of the leading member of a contract group is a piece-wage, the amount of which varies inversely with the amount of the fixed wages paid to the subordinate members, and directly

with the rate of speed in working maintained by the group.*

In all the cases of contract work, with which the writer is acquainted, the contractual remuneration of the subordinate workmen consists exclusively in a fixed rate of time-wage, while the entire balance of the lump sum paid for the work (after deduction of these wages) is paid over to the principal member or members of the group. At the same time, although it is not, so far as I know, the practice to give to the subordinates a specific contractual right to receive, by way of premium on efficiency, any definite share in this surplus or balance, yet in many cases an understanding exists between the leading man and his mates that he shall distribute some part of this amount among the men under him.

Before, however, discussing in detail the various forms of contract work, it will be useful to exemplify the general features of this method. We will seek our example in the engineering trade, in which a very large part of the work in many branches is commonly conducted upon this plan. A piece of work is given to a highly skilled mechanic to be done by him with the assistance of subordinates—mechanics of inferior skill, or unskilled labourers. The fixed time-wages of the subordinate workers are, in the first instance,

* Obviously, the faster the subordinate members of a contract group get through their work, the smaller will be the amount deducted from the contract price in respect of the time-wages of these workmen, and the larger will be the balance (of this price) which constitutes the remuneration of the leading man—the contractor.

drawn by them, as the work proceeds. The leading mechanic generally also draws in like manner sums equivalent to what would be his time-wages, if he were working on time-wage. But the sums drawn by the principal man are only in the nature of advances on account of his ultimate earnings, that is to say, of the balance of the lump sum payable in respect of the job remaining after deducting the aggregate time-wages of his subordinates; and, if the work should be done slowly, he may find that this balance turns out to be so small, that, instead of having earned his rated time-wages and also a "surplus," he has "lost on the job," *i.e.*, that his remuneration is less than it would have been, if he had been working during the same number of hours on time-wage.*

Here are two extracts taken at random from the books of a firm of manufacturing engineers, showing the actual working of the contract system:—

Plating up twelve buckets at 9*s* each, £5. 8*s*.

Time-wages of two labourers .	£2	4	0
Plater's rated time-wages .	2	8	2
Total .	4	12	2

Surplus (payable to the plater as leading man), 15*s* 10*d*.

* In such an event, if he has drawn his rated time-wages in full, as the work proceeded, he will be in debt to his employers, and will have to allow this debt to be cleared off by deductions from his future earnings.

Rivetting up twelve buckets at 4*s.* 8*d.* each, £2. 14*s.*

Time-wages of two subordinates (only partially employed) .	£0	16	10
Rivetter's rated time-wages .	0	15	7
Total .	1	12	5

Surplus (payable to the rivetter as leading man), £1. 1*s.* 7*d.*

Such being the method of contract work, it remains to state that this method is applied in three distinct forms. In the first of these forms the whole of the surplus remaining after the subordinates have received their time-wages, and the leading man has drawn the equivalent of his rated time-wages, is paid to, and retained by this leading man. The head of an engineering firm, which adopts the contract system in this form, declared, that equity demanded the exclusion of the unskilled workers from all participation in this surplus; on the ground that in his opinion the skill and industry of the leading man alone were the cause of this money being earned, the "coarse labour" of these subordinates in no way contributing to produce this result. In the second form of the contract system the leading man is expected to give a fair share of the surplus to the labourers or other subordinates; this sum being frequently divided by him between the group in the ratio of the rated wages of each member. Although in these cases the subordinates do not appear to possess any contractual

right to receive any part of this surplus, either as money due from the firm, or as money due from the leading man, there is no doubt that any gross unfairness in the division of the spoils would be the subject of complaint on the part of the men thus treated and of remonstrance on the part of the foreman of the department, whose admonitions the leading workman cannot afford to disregard.* The third shape, which contract work may assume, is seen in those numerous instances, in which the leading man is, indeed, allowed to retain the whole of the surplus, but that surplus is arrived at after deduction of the time-wages of the subordinates calculated at a higher rate of pay than their ordinary rating. For example, I know some very large engineering works, in which the contractors' subordinates are always paid "time and a quarter" or "time and a half" wages, according to whether the contract work is at the one or the other of these rates; and in certain bicycle-making workshops I found that, from the moment a workman was taken off ordinary (single-handed) day-work and placed under a man employed on contract work, this operative was paid 1*d* per hour more than his ordinary rating.

The reasons, which can be adduced in favour of giving to the subordinate members of a group working on the contract system a higher remuneration than

* In some cases a fair division is secured by the influence of the trade union; see the evidence of Mr. Burnett, Chief Labour Correspondent of the Board of Trade, before the Sweating System Committee (*Evidence*, Vol. II., pp. 529, 530).

that which they receive when working by themselves, are not far to seek. The leading man, who is practically a foreman in relation to his subordinates, naturally desires that the job may be executed with the utmost possible dispatch. He is given the chance of "making time and a quarter" by getting the work done with a speed, say, 25 per cent. higher than the normal rate; and, in order to secure a big surplus, he is bound to exact the performance on the part of his subordinates of as large an amount of labour per hour as incessant supervision, coupled with the requisite *modicum* of strong language, can secure. There seems to be no doubt that men, whether labourers or mechanics, working on a contract job work far harder than when employed on ordinary time-wage. Thus, in the engineering firm, from whose books the figures given above are taken, it was found that the total amount paid in a recent year for work performed by groups under the method of contract work was £1,225. 4*s* 10*d*, while, if the men engaged had received, in respect of the number of hours which the performance of this work occupied, their ordinary time-wage, the total amount of their remuneration would have been no more than £1,014. 5*s* 7*d*—a difference in favour of contract work of nearly 21 per cent. Here it is clear that the rate of speed maintained under contract work was much greater than that which would have been exhibited, if the men had not been engaged under this method. How much of the extra percentage of production was attributable to the leading men, and how much to the subordinates,

it would not be easy to say; the proportion would certainly vary according to the nature of the work in each case. But, speaking generally, the writer submits that, since the subordinate members of a group engaged on contract work invariably exhibit a greater degree of assiduity than they would display if working under other circumstances, these mechanics and labourers—even labourers of the most unskilled type—may fairly claim to be entitled to receive higher pay in proportion to their harder work, either by participating in the surplus, or else by receiving, by way of reward for extra efficiency, a higher rate of wages than when employed on single-handed time-wage work.

When we inquire what is the view taken by the working-classes in regard to the method of contract work, we find that in certain cases very little exception appears to be taken to the adoption of this method. In particular, where operatives on piece-work are assisted by learners, this method is practised with, as a rule, little complaint on the part of the employees. Nor, in regard to groups, in which the subordinate members are all adults, is the contract system invariably disliked. In many branches of industry the operatives are accustomed to work under this method, and do not appear to regard its operation with dissatisfaction. But the strenuous character of the supervision exercised by the leading member of a contract group under a system, which makes the amount of his earnings depend entirely upon the rate of speed maintained, causes many classes of working-

men to regard the method of contract work with marked disfavour.*

* In some instances, as for example in the case of many smith's strikers, the subordinate workmen, formerly paid time-wages under the method of contract work, have obtained a change in the system of their remuneration, and now work under the method of collective piece-wage, sharing the price of the work with the smith; see *Industrial Democracy*, by Sidney and Beatrice Webb, Vol. I., p. 290.

CHAPTER XII.

CO-OPERATIVE WORK.

Under all the methods of collective remuneration hitherto examined the relations between the different members of each group are determined by the employer alone. On the other hand, the distinctive features of Co-operative Work (whether the remuneration of that work be task-wage, or piece-wage, or some form of progressive wages) are that (1) the members of the co-operative group are associated by their own free choice, determining for themselves of how many persons and of what persons that group shall consist, (2) the associated workmen select from amongst themselves their own leader, and (3) arrange the division of the collective wages between the members of the group in such manner as may be mutually agreed upon between these associates as being equitable.

Our examination of the methods of collective remuneration already reviewed will have convinced us that in some forms of collective work a certain

danger of grave industrial evils exists. Leaving the detailed discussion of these evils to later pages, we may, in the meantime, say that, speaking generally, in all cases, in which the remuneration of the principal member of a group of workers is largely dependent upon the rate of speed in working maintained by the subordinate operatives, especially if this leading member is allowed to settle how many or how few men shall be employed on a given job, and if the selection and the discharge of the workmen rests mainly or entirely in his hands, there is a strong probability of this man's becoming a bully and a sweater. Now, the great value of the method of co-operative, as distinguished from collective, work is that this co-operative system is entirely free from the tendency to promote the ill-treatment of the subordinate workers not seldom found in cases in which work is done under a system of collective wages.

It may appear to some that an organization of industry so democratic in character as that, which is involved in the system of Co-operative Work, must entail practical difficulties of too grave a nature to permit of its general adoption. In this chapter, however, the reader will find particulars in regard to numerous instances, in which in the arrangements made with respect to the remuneration of labour in various occupations the leading features of the method of Co-operative Work will be seen to be present.

In agricultural operations it is common for self-constituted co-operative gangs to undertake work, such as hoeing, or as hay-making, and other harvest

work, taking the contract at a piece-wage price which the members divide among themselves.* In relation to the making of canals, roads, railways, and other similar works the method of co-operative work has long been applied, and has been found to increase the earnings of the men, while reducing the cost of labour. Thus, in *Work and Wages* (pp. 265, 266) Lord Brassey tells us that "in the canal-making days, men working in butty-gangs† would earn 4*s*, while others working on the day-work system would not earn more than from 2*s* to 3*s* a day"; and that in making the railway between Leicester and Hitchin "at the commencement of the works, instead of paying the workmen at so much per cubic yard, the piece-work system was abandoned, and the men received the average amount of the agricultural wages of the country, namely 2*s* 3*d* a day. On my father's attention being directed to this subject, the system was changed, and [co-operative] piece-work introduced. It was

* In order to avoid disputes as to the share in the joint remuneration to which each is entitled, it is best that the members of a co-operative gang be persons of very similar working capacity, who share equally. On small farms, where the facility for forming a group of such equally efficient labourers does not exist, it will be found that individual, and not co-operative, piece-work is the rule.

† "This word 'butty-gang' requires some explanation. It means that certain work is let to a gang of about ten or thirteen men, as the case may be, and that the proceeds of the work are equally divided amongst them, something extra being allowed to the head man. This system was originated when the formation of canals first began in England. 'Butty-gangs' were afterwards employed on the Paris fortifications which were constructed by French workmen" (*Life and Labours of Mr. Brassey*, by Sir Arthur Helps, p. 51).

found that, when the men were paid by the day, the excavation in the cuttings had cost 1*s* 6*d* a yard. When the system was changed, day-work abandoned, and piece-work adopted, the cost of the work was reduced to 7*d* a yard."

The co-operative system ("tut-work") in force in the Cornish mines "from the middle of the last century, if not from a yet earlier date, down to the present day"* is of the following nature:—The work to be done during a fixed period (work which consists in sinking shafts, driving levels, and making excavations† is marked out, and examined by the workmen during some days, thus affording them an opportunity of judging as to its difficulty. Then it is put up to auction and bid for by different gangs of men, who undertake the work as co-operative piece-work, at so much per fathom; finally each lot of work is offered to the gang which bids the lowest price, usually at a reduction on this price, this offer being rarely declined.

An instance of the application of a similar method

* Mr. L. L. Price, "*West Barbary*" (p. 13), a work giving full details in regard to the system of work and wages in the Cornish mines. This Cornish co-operative system "has been introduced—with some differences—into other districts, and has there met with equal success, and shown promise of equal longevity," for instance, in "Flintshire, Cardigan, Cumberland, Yorkshire, and Ireland" (*ibid.*, p. 24).

† The minerals are worked and dressed by men employed upon a system possessing the same feature of co-operative organization as above described; but in their case the method of remuneration is "product-sharing," a method, the application of which in this and other instances is commented upon *post*, Chapter XVIII.

of industrial remuneration in extensive coal mines in Belgium (Mariemont and Bascoup) is given in the Report on the Social Economy section of the Paris Exhibition of 1889, prepared for the Canadian Government by M. Jules Helbronner (pp. 28, 29). In these mines, we are told that "the greater part of the yearly work, such as the driving of machines, the repair and the care of the material, are all contracted for, the contracts not extending over a year. They are signed by the coal companies and the bands of workmen who accept them. The amount for which they are accepted is frequently based on the quantity of coal extracted. All the risks of the work, which very often varies in quantity, are accepted by the workmen. Past experience shows that, though the coal company may at times advance money, and, at others, the workmen may advance work, in the end the compensation is about equalised. Besides, the profits made by the [co-operative] contractors show that the confidence in the results was not misplaced. They have, in fact, signed new contracts under conditions entailing reductions of 20, 30, and even 40 per cent. in favour of the companies. If, therefore, their wages have not diminished, it must be because they have worked harder, or they have improved their method of working, making it more intelligent, and have thus seconded the efforts made by their superiors in providing improved implements." The average net results of the adoption of the method of co-operative work are, in this case, "an increase of wages of 20 per cent., with a proportionate decrease in the

price of returns." (Probably, "cost of production" is meant by these last words.)

In relation to the copper mines worked by an English Company (the Rio Tinto) in Spain, the following account is given in *The Pall Mall Gazette,* of April 11th, 1890: "The work is divided into contracts, which the men themselves undertake in gangs of two, four, six, or twelve, the proceeds being equally divided according to the number of days worked. The men invariably choose their own companions, with the result that the most industrious, steady and intelligent class of labourers is drawn to the mines, and those of indolent habits are generally kept out. At any period during the contract or month each man can draw up to 80 per cent. of his earnings."

One interesting example of the co-operative butty-gang system is to be found in the arrangements, which have for some years past been adopted in New Zealand in relation to the execution of public works. For a full description of this system the reader is referred to the Report on Co-operative Contracts prepared for the Labour Department by the present writer.* It is sufficient here to say that the application of this system to formation works on roads and railways, including bridges and culverts, the laying of the permanent way and the supply of sleepers, also in some cases to the erection of

* *Report on Contracts given out by Public Authorities to Associations of Workmen* [C.—8233 of 1896], pp. 42, 55, 237-244; as to the similar system adopted to a certain extent in the colony of Victoria, see *ibid.*, pp. 56-62.

buildings,* appears from the particulars supplied by the New Zealand Government to have met with success.

In the printing trade a true system of co-operative piece-work has long been known under the name of "working in pocket." In these cases the group ("companionship"), working together under a leading man elected by themselves, collectively undertake the performance of a specified amount of work in return for a lump sum, which is divided among all the members (including the leader) in proportions determined by the associated workmen. "Working in pocket" is much less common now than formerly in this country, but is habitual in France, where it is aptly designated "limited partnership" (*commandite*).†

With respect to co-operative groups in the engineering industry some remarks contained in a letter of Mr. Denny, the great Dumbarton ship-builder, are of interest. Mr. Denny there states that he knew of an instance in which a foreman "gave out his contracts in such small and scattered portions, and under such conditions as to the way in which the work was to be

* In all these cases, it will be understood, the material is supplied by the Government. In the erection of buildings a separate contract is entered into with a group of each trade concerned. Thus, a contract will be let to a gang of labourers for levelling the site, &c., another to a group of carpenters and joiners for the woodwork, another to a number of plumbers, another to a group of painters, and so on.

† The French Government has for many years got its official newspaper (*Journal Officiel*) printed by a co-operative society of compositors, the State furnishing the paper and also providing the plant and premises; see *Report on Co-operative Contracts*, 1896, pp. 104-108.

done and as to the composition of the co-partneries formed by the men, that he not only reduced their earnings to very nearly time rates, but created very serious disaffection among them. He was in the habit of forcing the men to take into their co-partneries personal favourites of his own, who very naturally became burdens upon those co-partneries. As soon as our returns and inquiries revealed to us these facts, we insisted that the contracts entered into with the men should be of a sufficient money amount to enable them to organize themselves and their work efficiently. We removed the defective arrangements above referred to, and laid down the principle that their co-partneries were to be purely voluntary. We were enabled, by these means, and without altering a single price, to at once raise their earnings from a level a little above what they could have made on time-wages to a very satisfactory percentage of increase and to remove all discontent" (*Life of William Denny*, by A. B. Bruce, p. 113).

In regard to dock labour the employment of co-operative gangs has in numerous instances been adopted, with varying degrees of success. In some cases employers have found that the co-operative labourers worked with very little zeal; in others the dockers have complained that, in practice, they were allowed no voice in the selection of the leading men, that the dock officials preferred dealing with certain men as chiefs of groups, and that the dockers found themselves virtually obliged, in order to secure employment, to give to these leading men a greater share

in the money paid for the work than the subordinate workmen thought equitable. In some instances, on the other hand, the co-operative method has been applied to dock labour with excellent results. As an example of this character may be cited the case of the coal-trimmers thus described in *Labour Gazette*, April, 1896, p. 111.

"For some years past the work of stowing coal at Burntisland (Fife) has been carried out by a co-operative group of associated coal trimmers, consisting of sixty-one members—a foreman and five squads of twelve men each. The association elects its own members, and once a year chooses the foreman, and appoints one member of each squad to be leading man. The foreman and the five leading men form the committee, which is the executive body of the organization. The rules of the association contain stringent provisions as to the suspension or the expulsion of members guilty of misconduct. On the other hand, while the voluntary discipline of the co-operative workmen is strict, their employers, the company which controls the dock, do not attempt to exercise any sort of control either over the membership of the association, the selection of the foremen or the leading hands, or the composition of the squads; nor are any labour superintendents employed by the company to supervise the work. The association is, in fact, in the position of an independent contractor, an agreement having been made with the committee to trim all coal requiring to be dealt with, at certain fixed rates. The agreement under which the men are now

working was made early in 1890, as a contract for one year, determinable by three months' notice on either side, and has remained in force until the present time.

"The money due from the employers on each fortnightly pay-day is paid by them to the foreman, by whom the amount (less certain small sums retained as working capital) is divided among all the members of the association, who (foreman and leading hands as well as ordinary members) all take equal shares. If a man be absent (from illness, &c.) his place is taken by a substitute, who is usually one of the members of another squad. Only in rare cases does an outsider act as a substitute; and in such cases the outsider shares equally with the members. The sums retained as working capital are used to keep up the small amount of tackle (value about £20) required for the work, and any surplus is divided twice a year among all the members equally. Each man owns his own shovel. The association meets regularly once a month; the committee once a fortnight. The foreman delivers to the committee the note showing the amount of work done in the fortnight which he receives from the employers, and hands over any cash retained for working capital to the treasurer, to whom he submits the accounts. The secretary to the committee makes a report to the association at each monthly meeting. At the end of the year the books are audited by a professional auditor.

"It may be added that the Coal Trimmers' Association is nearly identical with the trade union

organization concerned, the local branch of the National Union of Dock Labourers consisting entirely of members of the association, and only three members of the association being outside the union. The branch secretary is the treasurer of the association. The co-operative arrangements here described are stated to give satisfaction to both employers and employed." *

* A system of co-operative work applied to the discharging of coal is mentioned as working satisfactorily at Melbourne (*Royal Commission on Strikes, New South Wales, Minutes of Evidence*, 1891, p. 23). With respect to the important co-operative groups ("Nations") working in the docks of Antwerp, see *Forum*, September, 1894, pp. 117-121, and compare the "Société du Grand Corps" at Hâvre, mentioned in Rabbeno's *Società Cooperative di Produzione*, p. 186. A system of co-operative work largely prevails in Russia, where the practice of employing associated bodies of workmen, known as "Artels," has, for many centuries, extensively prevailed; see *Report on Co-operative Contracts*, 1896, pp. 62-81, 245-249. A system similar to that of the artel is universal in Bulgaria, under the name of "Zadrouga," especially among carpenters and market gardeners; see *Board of Trade Journal*, August, 1890, pp. 219-221, and *Co-operative News*, September 13th, 1890, pp. 929-930. As to gang-work among Belgians and Italians, see *Board of Trade Journal*, April, 1891, p. 374, and in Pomerania, see *Consular Reports*, 1891, No. 882, p. 6.

CHAPTER XIII.

PIECE-WAGE FOREMANSHIP.

In relation to the method of industrial remuneration the position assigned to the superintendents of labour is a matter of so great importance as to merit special consideration. The case, in which the person, whose duty it is to supervise the labour performed by subordinates, is remunerated—as most foremen are—exclusively by time-wage, calls for no remark. But, from the moment that the remuneration of the foreman or overlooker is made to vary directly with the rate of speed in working maintained by the subordinate workers, at once certain features are introduced, to the nature of which it is desired to direct attention.

The position of the superintendent of labour in relation to a group of subordinate workers must be considered under two distinct sets of circumstances, according as these subordinates are remunerated individually, or collectively. As an example of

superintendence remunerated by piece-wage in proportion to the rate of speed maintained in working by the subordinate operatives when these persons are employed and paid individually, may be cited the case of the yarn-washers in a woollen yarn factory, whom the writer saw working on time-wage under an overlooker remunerated by a piece-wage proportionate to the amount of their output; or—to take an instance in which the subordinate workers are on piece-wage—we may refer to the method adopted in regard to weavers in the cotton trade, who are employed on piece-wage, while the overlookers receive a poundage on the earnings of the weavers working under their supervision. No general objection is taken by the cotton-weavers to this system; though occasionally the operatives complain that their overlookers, anxious to earn a high piece-wage, "push" the workers under them to an undue extent; and strikes caused by such conduct are not uncommon.* Among the spinners in the cotton trade, whose trade union organization is stronger than that of the weavers, piece-wage super-

* See *ante*, pp. 68, 69. With regard to the remuneration of overlookers in the woollen-weaving trade, see the evidence before the Labour Commission of Mr. W. H. Drew, representing the West of Yorkshire Weavers' Association: "There is a bonus to the overlooker; but I do not know to what extent that prevails; but it certainly does prevail, and it is perhaps a cause of discontent. The overlookers, where the system obtains, are what I may term practically drivers in the sense of the word that they hurry their weavers up, and, as a rule, the weaver has to suffer all sorts of indignities because of it" (*Evidence before Labour Commission*, Group C., Vol. I., p. 223).

intendence is rare; and in cases, in which this method exists, the trade union usually succeeds in obtaining the removal of foremen convicted of bullying the operatives into over-exertion.

In those cases, in which the subordinate workers are remunerated collectively, the methods of piece-wage superintendence adopted necessarily fall into three categories. First (1), we have the case in which, under the method of collective piece-wage, all the members of the group, including the foreman, are remunerated by participating, in shares determined by their employer, in the joint price paid for the labour of the group; * next (2), we have the case in which, under the method of collective progressive wages, all the members, including the foreman, receive, in the first place, a fixed or *minimum* wage, all or some, including the foreman (or—it may be—the foreman alone), receiving in addition a premium on output; lastly (3), we have the system of contract work, which differs from that of collective progressive wages in this respect, that here the receipt of a guaranteed *minimum* time-wage is confined to the subordinate workers, while the leading member of the group receives, as his sole remuneration, the balance of the lump sum allotted in respect of the job remaining after paying the fixed time-wages of these subordinates (or a share in this balance).

(1) With respect to the position of the foreman under the method of collective piece-wage, it should be noted that the inclusion of the foreman within the

* See *ante*, p. 117.

group may occur in either of two ways. Either (*a*) a lump sum may be paid, *eo nomine*, for the aggregate labour of the group, of which lump sum the foreman takes a specified fraction ; or (*b*) the gang of journeymen being separately dealt with at the pay-office, the remuneration of the superintendent of their labour may consist in a sum proportionate to the aggregate output pronounced by these subordinates.

(2) With respect to the position of the foreman under the method of collective progressive wages, the working of that form of this system, under which the whole of the premium on efficiency of production goes to the superintendent of labour may be illustrated by the circumstances of a case, which occurred some years ago, and the particulars of which were verified by investigations made by the writer.*

The contractors to an important public body, although bound, under a heavy penalty, not to sub-let any part of the work undertaken by them, were alleged to have employed sub-contracting foremen, who were bullying the bricklayers into working at a rate, not only most prejudicial to the reasonable well-being of these workmen, but also utterly inconsistent with the possibility of good workmanship. The report

* The form of collective progressive wages, of which the case referred to in the text is an example, is probably by no means common ; and is cited, not to illustrate the normal working of the system, but to show the manner, in which the system is capable of being employed, when it is desired to "force the pace" by especially vigorous and vigilant supervision, and the danger of evil results to the subordinate employees present in this special type of progressive wages.

of this alleged iniquity went forth far and wide. Bricklayers many miles away told me that all the trade knew that the brickwork included in this contract was being scamped in an almost incredible manner; they said, for instance, that the mortar, instead of being laid on with a trowel, was "chucked on out of pails." These reports, which I believe to have been exaggerated, were followed by an attempt on the part of the trade unions to get the penalty against sub-letting enforced against the contractors. Upon inquiry, it was found that the method adopted in relation to the remuneration of each of two foremen was as follows: the brickwork was booked to the foreman at so much (say, £3. 2*s* 6*d*) per rod; from that sum were deducted, in the first place, the total amount of the time-wages of the bricklayers and labourers, and, in the second place (as was alleged by the contractors), the fixed time-wages of the foreman. The entire balance or plus was paid to the foreman. It was, in the result, found impracticable to enforce the penalty against the contractors, the method adopted not being, in law, a form of sub-contract.

If we were called upon to decide, to what extent the violent opposition exhibited to the adoption in this instance of this special form of progressive wages was justified, one most important point for us to weigh would be the ratio of the premium to the foreman's fixed salary, a point upon which these contractors firmly declined to give the public authority, by which they were employed, any information. A premium of, say, 5 per cent. on his fixed wages would

scarcely tempt a foreman into bullying the men under him; but how, if he depended for say, one-half or more of his entire earnings upon this premium upon production? Is it not obvious, that in a case like this, the foreman, almost to as great an extent, as if he were a "contract foreman," or a "sub-contractor," and accordingly wholly dependent for his remuneration upon the "profit on the job," must find himself exposed to an all but irresistible incentive to slave-driving? There is, unquestionably, much to be said in favour of such a view of the circumstances in question; and we must remember that builders' foremen at an outlying job (such as this was) have practically unlimited powers of weeding out at their uncontrolled discretion the weaker workmen, and of discharging all who will not, or cannot, keep pace with the specially fast workers whom, if they are under any special inducement to hurry on the job, they take care to engage. It seems certain that any system resembling that here referred to must lead, on the one hand, to the nigger-driving of the workmen, and, on the other, to the scamping of the work.

(3) The third of the types of piece-wage foremanship now under consideration is that which comes under the category of contract work. That the contract foreman, who agrees to get a job done at a fixed price, depending for his remuneration exclusively upon the balance of this price remaining after he has been debited with the time-wages of the subordinate workers, is under a very strong incentive to

over-drive these subordinates, is a fact too patent to require proof or comment.

In many instances the method adopted for the remuneration of the foreman is—if we are to employ a strict economic analysis—a combination of two or more of the several forms of piece-wage superintendence distinguished in this chapter. Take, for example, a case in which a foreman contracts "to get so much work done for so much money," making what "profit" he can, after allowing for the payment of the wages of the subordinate workers. Here, if all the subordinates are on time-wage, we have that form of piece-work superintendence which comes under the category of contract work; but if some of these subordinates are on piece-work, then, so far as his relation to these particular subordinates is concerned, the piece-work foreman is not a contract foreman, the method adopted being, as explained above (p. 168), properly classified as a form of collective piece-wage. Under these circumstances it will be convenient if, leaving on one side our exact classification, we agree to speak of the foreman, whose supervision of subordinate workers is remunerated by a piece-wage or by a premium, without reference to the particular type to which he may belong, by the generic name commonly applied to such a man by the working-classes—the name of "piece-master."

The piece-master system is to be met with in very many branches of industry; though—so my inquiries lead me to believe—this method is considerably less common in trades, in which the trade union organiza-

tion is fairly effective, than in those in which the workers are imperfectly combined. In the course of the lengthy investigation of the London boot trade, which I made for *Life and Labour of the People*, I came across only two instances of piece-wage foremanship. One of these was in the "lasting" department. The lasters are a well-organized section of the trade; but in relation to the particular employer in whose workshop I found this system in force, the trade union had very little control. I did not detect any bad results arising from the adoption of the piece-master system in this case; nor in the second instance, which was found in the upper-making factory of a large manufacturer, where the employees (other than the foreman) were women, none of whom belonged to any trade organization.*

Most of the other cases of piece-master foremanship, which I have come across, have occurred in trades in which no trade union organization, or none possessing any real efficiency, existed. I have heard of such a case in regard to watch repairers at Glasgow; women in East London in many unorganized trades are to be found at work under piece-working foremen; so are

* The earnings of the lasters working under a piece-master referred to in the text, ascertained by inspection of their wages-books, were higher than those of almost any other men in the trade. They were on piece-work, worked such hours as they thought fit, and altogether seemed to have no special ground for complaint. The women making uppers under this system alluded to above were some of the very best-paid women that I met with; they worked (some on time-wage, some on piece-wage) the Factory Act hours. The accommodation in both cases was excellent.

some bag-makers of the less skilled sort, though the influence of the trade union has stamped out the piece-master system in the portmanteau trade.

In the building trades, although the trade union organization is vigorous, the piece-master system is by no means unknown. In cases of the description here referred to, a given quantity of work is contracted for by the foreman or some leading man who "takes it piece-work," receiving as his remuneration whatever balance remains after the payment by his employers of the wages of the subordinate workmen. Work performed under these conditions, equally with work done under "sub-contract," is said by the men in the building trade to be done "under the sweating system," and the piece-working foreman is the subject of no less bitter denunciation than the sub-contractor, properly so called.

By way of illustration, it may be useful to cite a case, investigated by the present writer, in which, after a public body had, at the instigation of the trade unions, forbidden their contractors to continue sub-letting certain work on a large job, the work was taken away by this firm from the sub-contractor, under whom it had until then been done, and at once given out to a foreman—a man, whom these contractors had previously employed on other jobs as a sub-contractor. This foreman took over the work (apart from the provision of the principal materials) as contract work, his remuneration consisting in the difference between the total time-wages of the journeymen employed in executing the work and a

certain agreed labour-cost, at which he undertook to get it done, being in fact the very same price at which the dismissed sub-contractor had previously got the work done. This man's interest in getting his subordinates to work quickly was, of course, precisely the same as that of his predecessor; and he "shoved the men along" in identically the same manner, with the result that they went out on strike. These workmen suspected, but, naturally, were unable to prove, the existence of this arrangement, which the contractors vaunted to me as a clever stroke of business. I have known other cases, in which foremen have, by private arrangement with the contractors, been paid by the piece in the manner above described, the treatment of the employees of these contractors being, under these circumstances, in all respects similar to that which they would have experienced at the hands of a sub-contractor.

As a matter of definition, it may be well to note that, while the men working under a sub-contractor are employed by him and not by the firm for whom the sub-contractor does the job, those working under a piece-master foreman are in the service of the same persons by whom this foreman is himself employed. But, as a matter of fact, the distinction between the sub-contractor and the piece-master is one of little practical importance. Both alike are, from the nature of their position, under a strong incentive to "sweat" the workers; and both possess ample opportunities of doing so. It is, no doubt, true that the piece-master's employers, although, in settling what rate of wages

shall be paid to the subordinate workmen, they frequently follow implicitly the guidance of their foreman, yet in most cases exercise some sort of control in this matter, and it may, therefore, be impossible for the piece-master to get their wages cut down to the same extent as he would cut them down if he were a sub-contractor. All the same, it is obvious that the piece-master can, in any case, always "sweat" the operatives working under him by compelling them to work at a rate far beyond their normal speed. If the accepted rate of wage for any class of labour be sixpence per hour, there is, for all practical purposes, quite as much oppression of the kind known as "sweating" in getting "sixpennyworth of work" out of a man for fivepence by forcing him, while employed at sixpence an hour, to work 20 per cent. faster than the normal rate of speed as there is in getting his labour at the same reduction below its "fair" value by paying him only fivepence an hour, while not exacting more than the standard amount of output per hour.* Nor is that well-known custom of the sub-contractor—the custom of "working short-handed,"† that is to say, of putting three men on to do a job which (unless the men work with an intensity of exertion very much greater than the normal standard) requires four men to do it—altogether unheard of under the piece-master system, especially in cases in which the piece-working foreman is engaged on a job remote from headquarters, or in which the

* See *ante*, pp. 35, 70, 77. † See *ante*, pp. 37-41.

employer, for any other reason, interferes little, if at all, with the discretion of his representative.

All things considered, it is difficult to discover any respect save one, in which the practice of giving the work to a piece-wage foreman is, to any material extent, less oppressive than that of giving it to a sub-contractor. Certainly, when the work is done away from the premises of the principal employer, the keenness of the competition between the rival sub-contractors, each eager to take the work away from his neighbour, however small the price given for it may be, is a special and a most obnoxious feature of sub-contract in very many industries—a feature, which can seldom find a parallel in the cases in which the work is done "indoors." For, even if the employer put the work up to Dutch auction, giving it to the foreman who undertakes to get it done for the smallest sum, there is no scope for competition of the same cut-throat character as goes on among a crowd of "outside" sub-contractors. Nor should we omit to bear in mind the important fact that combination among the workpeople to resist oppression is easier, when the work is done in a big factory, than when it is done in small, scattered "sweating-dens." There can, therefore, be no doubt that the pernicious tendencies too often apparent in the system of piece-wage foremanship are present, in a still greater degree, in most instances of what is commonly termed "outdoor sub-contract."

To sum up in regard to piece-work superintendence generally. It is clear that in cases, in which it is

desired to secure a high quality of workmanship, any method, which makes the amount of the remuneration received by the superintendent of labour depend entirely upon the rate of speed maintained in working, must involve a considerable danger to the interests of the employer, the foreman being thus placed under a strong inducement to pass scamped work as perfect, or even to represent work to have been put in, which has never been done at all. At the same time, the practice of paying to a foreman, in addition to his wages, a moderate bonus has much to recommend it. For unless his own pecuniary interests are in some measure at stake, a foreman cannot always be relied upon to secure the maintenance of a reasonably high rate of speed in working. Not that it is impossible, in the case of a foreman remunerated by a salary, to insist upon a certain standard of efficiency in his work. Of course, in a well-ordered business a strict account of the work done under each foreman is kept; and, just in the same manner as a journeyman on time-wage, who does not turn out a *minimum* quantity of work in the week, is sure to be discharged, so a foreman, who does not take care to get at least sixpennyworth of work done for every sixpence paid away in wages, is not likely to retain his position for any length of time. But the great advantage of the method of piece-wage foremanship is that it supplies a self-acting stimulus, which dispenses with the necessity of incessant supervision of the foremen by their employer. On the other hand, this stimulus may—it is obvious—easily lead the superintendent of labour to over-act

his part, and to promote his own pecuniary interests by exacting from the operatives under his control a degree of exertion seriously prejudicial to their well-being. It is, therefore, not surprising that all forms of piece-work superintendence are viewed with disfavour by the working-classes. The grounds of this antipathy, which finds its chief expression in the popular denunciation of "Sub-contract," are so fully commented upon in the succeeding chapter, dealing with that "method" and with "the sweating system" generally, as to require no further treatment in this place.

CHAPTER XIV.

SUB-CONTRACT.

In preceding pages we have considered the case, in which a group of persons, all of them being in the immediate employment of the same master, are employed under the method of Contract, that is to say, under an arrangement, by which the remuneration of the leading man in this group consists in the balance remaining after deducting from the lump sum agreed upon as the price of a given amount of work the sum total of the wages of the subordinate workmen (or a share in this balance). The amount received by this leading man is the piece-work remuneration of his labour—labour consisting, in most cases, partly in manual work done by the man himself, and, in all cases, in the superintendence which he exercises over the work of his subordinates. The nature of the remuneration received by the leading member of a group engaged under the method of Contract Work is thus seen to closely resemble profit, differing, however, in this respect, that a man cannot properly be said to earn

a profit (*i.e., profit de l'entrepreneur*), unless the earnings referred to accrue to this man by reason of the employment by him of subordinate workers. Now, under the method of Contract Work, the subordinate workers are not in the employment of the head man of the contract group, but are the employees of the same master by whom this man is employed. This remark, as we have already seen (*ante*, p. 175), applies also to the subordinate workmen who are employed under the superintendence of a piece-master. The distinction, therefore, between a "contractor" or a piece-work foreman, on the one hand, and a "sub-contractor," on the other, is that neither a contractor nor a piece-master is an employer, while the sub-contractor is an employer, being, in fact, a sub-employer, working under a superior employer.

The earliest critical appreciation of the method of sub-contract, with which the writer is acquainted, is that contained in McCulloch's *Treatise on Wages* (pp. 70, 71). Describing the sub-contractor, who undertakes to execute a certain amount of work for a certain price, and who employs others to assist him in its execution, McCulloch observes that "it is his object to finish his task as expeditiously as possible, and to employ his profits as a means of extending his business. In this way he gradually rises in the scale of society, till, having ceased to work with his own hands, he becomes a contractor on a large scale, or engages in some other occupation. And it is plain that the training and experience he has had, and the habits he has formed, must make him at once a vigilant

and a discerning master. The foundation of thousands of middling, and of very many large fortunes, have been laid in the way now stated. It is, in truth, the broadest, the easiest, and the safest of the various channels by which diligent, sagacious, and frugal individuals emerge from poverty, and attain to respectability and opulence. Those, who thus rise to distinction, may be emphatically said to be the architects of their own fortunes. They owe nothing to interest, to favour, or to any unworthy means. They stood originally on the same level with their fellow-workmen, and they owe their elevation to the judicious exercise of talents common to them all."

The highly favourable opinion of sub-contract work entertained by McCulloch agrees in all respects with the views expressed by Professor Cairnes, who, in an article published in 1865, in *Macmillan's Magazine* (Vol. XI., pp. 181-190),* entitled "Co-operation in the Slate Quarries of North Wales," called attention to "a species of co-operation prevailing throughout some large industries in Great Britain" known by the name of "the contract system," a system which will be seen to be identical with that referred to in the present chapter—the method of sub-contract.

"The portion of the slate, which it is proposed to work, is divided into sections carefully marked out, which are let out as 'bargains' to as many small co-partneries, consisting generally of three or four working-men. These co-partneries 'contract' to produce slates, each from the section of the rock assigned to it, according to sizes and shapes at so much per thousand."

* Republished in *Essays on Political Economy*, pp. 166-186.

The men, who take these contracts, are "the older, more experienced, and better off," while "the remainder are employed by them as labourers at fixed wages."

"The capital employed in the undertaking is furnished principally by the proprietors or lessees of the quarries, but a portion is also provided by the 'contractors.' Thus the former supply the larger and more expensive machinery, such as the tramways, waggons, steam-engine, pumps, slate saws, and planes, &c., while the latter furnish the smaller tools, as well as the gunpowder used in blasting."

Professor Cairnes observes that "the beneficent tendency of these arrangements" has resulted in the very satisfactory position of the workpeople, and cites the case of a manual labourer "who was known to be in receipt of between £80 and £100 a year, independently altogether of his current earnings—the return on capital saved and invested," while "the earnings of the 'contractors' average something like £5 monthly." At the same time it is specially noted that all the labourers have an equal opportunity of attaining the rank of "contractor;" hence arises "a state of things which serves to diffuse throughout the entire organization an influence of the healthiest kind." *

A writer contemporaneous with Cairnes and no less sympathetic in his attitude towards the claims of labour is Thornton, who draws attention to the useful part played by sub-contract in technical education. "When, according to a not uncommon practice in

* Compare *Evidence before Labour Commission*, Group A., Vol. II., pp. 5-9, 18-20.

certain trades, a superior workman takes from his employers a sub-contract for the performance of a certain job, he generally associates in it with himself a number of inferior hands, apprentices and others, whom it then becomes his interest to instruct in his and their business, instead of leaving them, as apprentices are generally left, to pick up instruction as they can" (*On Labour*, p. 316).

Another authority of eminence, possessing a large knowledge of the practical details of labour organization, Lord Brassey, speaks in terms no less eulogistic than Professor Cairnes of the method now under consideration. Lord Brassey tells us that "on a long line of railway every cutting, bridge, tunnel, embankment, and station is executed by one or more separate sub-contractors;" * and that in his father's business "all his work was done, as far as possible, by sub-contract, which is piece-work on a somewhat larger scale. Even the scaffolding for the erection of an iron bridge, such as that over the Severn, near Colebrook Dale, of two hundred feet span, was carried out upon the principle of sub-contract; and the same system was adopted for the excavation of shafts and adjacent lengths of tunnel. Payment by piece is beneficial alike to the master and the men."† Mr. Denny, the shipbuilder, in a lecture in which he expressed himself as a warm advocate of the method

* *Lectures on the Labour Question*, p. 137.

† *Work and Wages*, pp. 264, 265. Compare *Life and Labours of Mr. Brassey*, by Sir Arthur Helps, pp. 41-50.

of sub-contract, refers to "the bands of workmen in a ship-yard, engaged in the larger operations of plating or framing an entire ship, and managed and paid by one or more superior tradesmen. . . . You will invariably find such men paying their labourers a greatly increased rate of wages compared with that paid by the firm." * This is accounted for by the fact that "they select the best men, and knowing they are the best can afford to pay such wages as will induce these men to do their utmost." †

The terms of laudation, in which the method of sub-contract has been spoken of by economists and social reformers, such as Cairnes and Thornton, and by practical business men, such as Denny and Lord Brassey, are all the more striking when we remember that it is this same method which, under the sinister appellation of "the Sweating System," has in recent years aroused in an unparalleled manner the indignation of the public, and has formed the subject of inquiry on the part of a Select Committee of the House of Lords. No attempt to summarise the im-

* *Worth of Wages*, p. 18. In the letter already (*ante*, p. 162) referred to, which was written some years after the publication of this lecture, Mr. Denny modifies his praise of sub-contract, admitting that instances occasionally occur in which sub-contractors "treat their labourers, either intentionally or unintentionally, with harshness" (*Life of William Denny*, by A. B. Bruce, p. 113).

† "We know that sub-contractors often pay far better wages than the chief contractor can, because they know their men better, and get better work out of them" (*Contemporary Socialism*, by John Rae, second edition, p. 432); compare *Report on Co-operative Contracts*, 1896, p. 57; and see *ante* p. 151 *n*).

mense mass of evidence taken by that committee, and published in five enormous blue-books containing the answers to nearly thirty-three thousand questions, can be made here. But in reference to the subject of the present chapter—the position occupied by sub-contract in relation to the method of industrial remuneration—one point must be brought to the notice of the reader. Although the nature of the inquiry made by this committee was such that all cases of sub-contract, in which no complaints of ill-treatment were made by the work-people, were, so far as possible, excluded from its investigations, yet, even upon the evidence taken by the Lords' Committee, it is abundantly clear that the employees of sub-contractors are not in every instance alike exposed to that kind and degree of ill-treatment which goes by the name of "sweating."

That the earnings of many of the workpeople employed by many sub-contractors are very low indeed, and that, in order to keep body and soul together, they are forced to work, as one witness puts it, "all the hours that God sends," the evidence before this Committee amply proves. Thus, in East London, Mrs. Killick works from 6 a.m. to 8 p.m., and does not clear 1*s* a day. Mrs. Hayes, another trouser finisher, works from 8 a.m. to 10 or 11 p.m., assisted by her daughter; the two together earn 5*s* 6*d* a week. Mrs. Casey, a shirt machinist, begins between 7 and 8 in the morning, and has to work sometimes till 11 at night. Mrs. Liddle, who often works longer than this, earns in the same trade from

5*s* to 7*s* per week, less 9*d* for cotton and 2*s* 6*d* for the hire of her sewing machine. Mrs. Attewell, another shirt machinist, works from 7 a.m. to 8 p.m., and reckons that, by the time she has paid her rent and firing, she has not more than 6*d* a day left. Mrs. Glazier can earn at shirt finishing not quite 4½*d* per day. Nothing can well be more miserable than the position of these women, all of them widows, or wives of men either permanently disabled or continually out of work. But, apart entirely from the method of their employment, no one of them, situated as they unfortunately are, could well expect to earn a decent living. Mrs. Killick's work was done in the intervals left vacant by her assiduous attention to a sick husband and to three young children. Mrs. Hayes has got two children at home, the one who assists her being in poor health, and is herself a great invalid. Mrs. Casey has a young family (number not specified) to look after. Mrs. Liddle is a novice at her trade, has her domestic duties to attend to, and says: "If I could have the little baby put at a home, and had my work regular every day, I could earn 12*s* a week." The position of Mrs. Attewell is similar to that of Mrs. Casey. Mrs. Glazier suffers from very weak eyesight.

On the other hand, three witnesses called before the Committee prove distinctly that, even in overcrowded Whitechapel, good money can be earned by women employed by sub-contractors, provided always that these women are able to do work very much more skilled than the most unfortunate people just referred

to, all of whom are engaged upon goods of the lowest description. Miss Gashion, a button-holer, employed by a sub-contracting tailor (Mark Moses), being set to work in the committee-room under the supervision of the clerk, made four button-holes in thirteen and a half minutes, thus earning at the rate of 9*d* per hour. This woman (whom I know to be a very fast worker) deposed that her hours of work are those permitted by the Factory Acts, that she has earned 26*s* in a week, and can habitually earn more than 4*s* a day (less 20 per cent. for her gimp and twist). Miss Jane Sessions, a machinist, also working for Mark Moses, says she makes 4*s* 4*d* per day; she averages four to four and a half days' work in each week. Miss Annie Sessions, a baster, employed by another sub-contractor, works the same hours as the last two witnesses, and earns 4*s* a day; she gets work about four days out of seven through the year. Can it be said that women in the position of the button-holer, the machinist, or the baster just mentioned, are sweated?

When we come to the male employees of the sub-contractors in London, we find, again, that, while the condition of the unskilled workers is deplorable almost beyond conception, that of the more capable workers is by no means so unhappy. Take the boot trade, in regard to which we must note that the evidence here summarised refers to a state of things subsequently changed; for the strike of April, 1890, has to a great extent abolished "out-door" work and sub-contract, so far as the "lasting" and "finishing"

departments are concerned.* The part of the work of making a boot which requires the smallest degree of skill is the "finishing." The finishing of boots of inferior quality—the task of finishing boots of the better class was never entrusted to sub-contractors—was entirely in the hands of foreigners. The work was divided into two parts, of which the one that demands by far the greater degree of skill, the "knifing," was performed by the sub-contractor himself. The "journeyman" finishers, whose work was of the most unskilled description, were perhaps the most unfortunate set of men in the United Kingdom, if not in the whole wide world. The *genesis* of the boot-finisher may be exemplified by the case of Hirsch. This witness had been an agricultural labourer in Russia, and had come to England six months prior to his appearance before the Committee. He presents himself to a "countryman" (fellow townsman in Russia) of his, who is himself a journeyman finisher employed by a sub-contractor. "He [the "countryman"] gave me nothing the first week, but he gave me food, and he gave me a shilling for the second week, with food." Then Hirsch is advanced to 5*s* a week, and now he is making 8*s*.

"I start on Sunday morning, commencing at 7, and work up

* For a detailed account of the boot trade in East London, see the paper by the present writer in *Life and Labour of the People*, edited by Mr. Charles Booth, Vol. I., first edition, pp. 241-308; see also *Reports on the Volume and Effects of Recent Immigration*, published in 1894 by the Labour Department, pp. 67-94, 157-194.

till 10; and the other days I start at 6, and work right up to 10 as well, but on Thursday I work up to 12 o'clock, and Friday come again at 6, then I work till sunset."

But, if the present circumstances of this agricultural labourer, who turns boot-finisher in a foreign land, are pitiable, what are we to say of his future? The chances are very great that, his faculties being hopelessly blunted by the cruel strain of this truly awful existence, he will never acquire the superior ability demanded in the "knifing," and can never look forward to earning more than about $3\frac{1}{2}d$ per hour, and that in a trade in which employment is so irregular that his average weekly earnings are unlikely to exceed those of Solomon Rosenberg, who says—

"The average through the year is 15*s* a week, and out of that I have to pay 6*s* 6*d* weekly rent, and then I have to pay 1*s* 3*d* per week for paraffin for lamp, and 1*s* 3*d* per week for coal for burning, then I have to pay 6*d* a week to send six children to school at a penny a week, that comes to 9*s* 6*d* a week, and then take into consideration that I have left only 6*s* a week to maintain seven children, nine in family."

Rosenberg (who was a "professor" in Poland before he came to this country in 1870, with 10*s* in his pocket, and whom I know to be a hard-working and competent journeyman) was most unmistakably sweated. But, on the other hand, the evidence contains full details with respect to the position of other men—skilled hands in the tailoring trade, for example—also working for sub-contractors, whose circumstances are by no means so wretched as those of this typical boot-finisher.

To refer again to Mark Moses, whom Mr. Burnett

calls a "fair representative of the sweaters in East London," saying that "he does not do the best class of work, although he employs his people under good conditions." This sub-contractor is shown by Mr. Burnett to employ "in a large well-fitted workshop" the following men:—One general tailor at 8*s* 6*d* per day, five fitters (at 6*s*, 5*s* 6*d*, 5*s*, 4*s* 6*d*, and 3*s* 6*d* per day), seven machinists (one at 8*s*, one at 7*s* 6*d*, one at 5*s* 6*d*, two at 4*s* 6*d*, and one at 4*s* per day), four pressers (at 8*s*, 7*s*, 5*s*, and 4*s* per day). Mark Moses is proved to find employment for his hands for nearly five days out of seven (which corresponds with the evidence given by another sub-contractor, employed by the Civil Service Stores, and with the observation made by Mr. Burnett, that the larger sub-contractors "have good regular work"). It is clear that, so far as the remuneration of their labour is concerned, the employees of Mark Moses and of other sub-contractors of the same or of a superior type, can scarcely be said to be sweated. Woolf Zeitlin, secretary of the Jewish Branch of the Amalgamated Society of Tailors, says: "The machiners and pressers are well paid; they get as much as 7*s* or 8*s* a day." Another machinist, formerly president of the London Tailors' Machinist Society, told the Committee that his wages were 9*s* a day, that these wages are not at all exceptional, and that friends of his get 10*s*. At the same time, the hours of employment, even in an otherwise well-regulated workshop, like that of Mark Moses, are very much longer than we can approve of; for his general tailor

works thirteen and a half, and his other male employees thirteen hours in the day. In this most important respect, sweating, in the sense of overwork, appears to exist in the workshops of all the East End tailoring sub-contractors without exception.

The great majority of the sub-contractors in the metropolitan tailoring industry are located in East London. In the West End we find an instance of a sub-contractor (Poswa) who pays to his worst man £2. 5*s*, and to his best £2. 17*s*, per week; his hours are proved to be from 8.30 a.m. to 8 p.m., with a half-holiday on Saturdays; the accommodation is shown to be excellent. It is difficult to see how the employees of this sub-contractor can properly be termed sweated. But another sub-contracting tailor (Marks) admits employing his hands from twelve to fourteen hours a day; and I am inclined to believe that, so far at any rate as overwork is concerned, a large proportion of the men employed in the workshops of these West End sub-contractors are, beyond all question, sweated.

Turning from Whitechapel and the West End to the "east metropolitan district" (including a large area in Hackney, Bethnal Green, Mile End, Old Ford, and Bow, in which sub-contractors, engaged in the tailoring, and in many other industries, are extremely abundant) we find that Mr. Bowling, the factory inspector, reports as follows:—

"In the occupations where work is given out in my district by contract, the facts, as far as I have been able to ascertain them, show that according to the accepted rate of wages, skilled labour of all sorts is fairly remunerated, while in many cases unskilled labour is poorly paid; but whether the payment of unskilled labour is suffi-

cient, *i.e.*, for the labour given in return for it, is a most difficult point to decide; the principal cause of the lowness of wages paid is the excess of unskilled labourers over the demand for their labour; and, in my opinion, this excess of unskilled labour is produced more by indiscriminate charity and Mansion House Funds than by other agencies. I remember a case where the father of a family was incapacitated, and required the nursing and attendance of his wife and daughters. They could not have made long journeys to get the work, but a contractor was established near them, and from him the mother and two daughters obtained work enough to bring them in 27*s* a week; and they were able to attend to all their domestic duties as well. The house was in excellent order, and the girls looked healthy and strong. I only mention this case because I believe in my district, which is further away than Mr. Lakeman's [the 'central metropolitan'] from the big warehouses, the contractor is often a beneficent and useful person."

But it is when we leave behind London, with its congested population and its vast supply of female and foreign cheap labour, that the less unamiable features of the sub-contract system strike the eye. At Liverpool the workshop accommodation provided by many sub-contracting tailors is shown to be good. "The hours of work," writes the factory inspector, "in the sweating shops are almost universally from 8 a.m. to 8 p.m., with one hour for dinner and half an hour for tea. Overtime on Friday nights is very prevalent." In the table of wages given by the same authority we find pressers getting 7*s* or 7*s* 6*d*, and good machinists (female) are rated at 3*s* to 4*s* per day. At Leeds the sub-contractors were found by Mr. Burnett (see Appendix O, *Report*, Vol. IV.) to work on a large scale, "the average of machines to each master is somewhere between twenty and thirty." Some are "men of much capital, and have laid down engine-power to

drive their sewing-machines." Mr. Burnett adds that "the work is chiefly carried on in workshops of fair size, fairly cleanly, well ventilated, and under the supervision of the factory inspectors." The hours are for head men ("fixers") eleven and a half hours per day, for the others ten and a half. Overtime is very seldom worked, even in the busy season. One Leeds sub-contractor tells the Committee that he pays his men "on the board" from 30*s* to 36*s*; pressers, 33*s* to 38*s*; under-pressers, 24*s*; machinists (male), 33*s* to 42*s*, and (female) 15*s* to 32*s*, per week; and a glance at the figures given by Mr. Burnett shows that the wage of a competent hand employed by a sub-contractor is, for a man, not less than 6*s* or 7*s*, and for a woman, from 4*s* to 5*s*, per day. A female operative, working for one of the Leeds "middlemen," told the Committee that these sub-contractors "pay better than the inside masters." * The factory inspector of the district

* Information as to the wages paid to tailoresses employed by the "inside masters" (manufacturers) at Leeds is contained in an article by Miss Clara E. Collet in *Economic Journal*, September, 1891. A comparison of the figures given in this article with those contained in Mr. Burnett's report shows that women can earn at least as good day-wages in the workshops of the sub-contractors as in the factory of a manufacturer. Possibly the women give more in return when employed by a sub-contractor; and they appear to be then affected to a greater degree by irregularity of employment. In East London I came across a large firm which gave out some of its trouser work to a sub-contractor (a person employing over one hundred operatives, some in an admirably arranged factory, provided with motor power, others in their own homes); the women in the trade stated that they prefer working for this sub-contractor to being employed direct by the firm, and declared that they earn more money when employed by the sub-contractor.

declares point blank that there is no sweating in the Leeds trade.*

A due regard for the patience of the reader will not permit me to follow the evidence given as to the tailoring trade throughout the provinces. Suffice it to say that, speaking of the sub-contractors in the tailoring trade at Birmingham, Mr. Tinker, Inspector of Factories, says: "I do not think that there is any trade in any town in England where the wages are better, where the people seem better off, and there are no complaints"; and one of these Birmingham sub-contractors informed the Committee that all his men (excluding learners) earned 6*s* a day, working five days a week all the year round, from 8 a.m. to 8 p.m., with an interval of one hour for dinner and half an hour for tea. At Glasgow, a thoroughly efficient man can command from a sub-contractor as much as 7½*d* per hour; while capable female machinists take 5*s* per day. At Bristol and Stroud, where there are a number of tailoring sub-contractors, the factory inspector writes that "good wages are paid to their work-people; in fact, more than the current rate. Their workshops I found to be in good condition."

* Miss Collet says, "The title of Mr. Burnett's report ('On the Sweating System at Leeds') is misleading. There is a system at Leeds, but it is not a sweating system" (*Economic Journal*, September, 1891, p. 469). The system at Leeds is, of course, the same system as that in Whitechapel, &c.,—the system of sub-contract. For a later account of the conditions prevalent in the sub-contractors' workshops at Leeds see the report made by Miss Collet, as Labour Correspondent of the Board of Trade, in *Reports on the Volume and Effects of Recent Immigration*, 1894, pp. 116-122.

The hours of work are those allowed by the Factory Acts. Another inspector writes—

"There are many cases in Plymouth, Stonehouse, and Devonport, in the tailoring and outfitting trade, in which work is let out to a contractor or middleman, who undertakes to perform it and finds the requisite labour; but I have not found any case in which such labour is inadequately remunerated, and the workshops of this class are, on the whole, fairly ventilated and not over-crowded."

A third inspector of factories remarks—"In brick manufacture it is common for the foreman to make bricks at so much per thousand for the occupier of the works, paying his own labour; but I have never heard that the wages were unduly lowered thereby."

Enough will have been said to justify, even from the evidence taken by this Committee, the assertion that there can be sub-contract without sweating; but it must again be pointed out, that many more cases of innocuous sub-contract might have been brought to the notice of the Committee, if it had not been for the manner in which the inquiry was limited, so far as possible, to cases in which sub-contract was alleged to be accompanied by the ill-treatment of the workers. This may be exemplified by the method adopted in investigating the sub-contract system in the boot trade. Among the numerous operations, which together make up the manufacture of a boot, there are three in which sub-contract exists—the "upper-making," the "lasting," and the "finishing."* In the "lasting" there was considerable, and in the "finishing" there was (as already stated) the utmost

* See *ante*, pp. 188-190.

conceivable, misery among the workers employed by the sub-contractors; in the "upper-making" department no complaints of oppression on the part of the sub-contractor are made.* Accordingly, while some little evidence is adduced in regard to the sweating-masters in the lasting, and much as to those in the finishing, branch, not one of these upper-making sub-contractors (of whom there are many hundreds in Hackney, Bethnal Green, and other parts of East London, to say nothing of those in the provinces) was brought before the Select Committee, nor was a single person employed by any one of them asked to bear witness; and this, although more than one of the persons brought before it to give testimony in regard to the boot trade distinctly informed the Committee of the wide prevalence of sub-contract in the upper-making department.

Turning now from the evidence given before the Lords' Committee to instances of sub-contract work, which the writer has come across in his investigations into different points connected with labour questions, the reader is begged to note that the examples which follow are simply given as instances casually met with by the writer, and are by no means intended to form an exhaustive list of the industries in which sub-contract is prevalent. For, while a very general opinion appears to exist that sub-contract is a peculiar and comparatively rare mode of industrial organization, my own observation of the facts has convinced me that sub-contract is a system so widely adopted

* See *post*, p. 198.

throughout the length and breadth of British industry that any attempt to make here an exhaustive enumeration of the trades, in which it is met with, would be altogether impracticable.

When I was making investigations in regard to the boot trade, I came across a large number of sub-contractors in different parts of the districts examined. I found that the uppers of "bespoke" boots for the retail "hand-sewn" trade are usually made by "closers," many of whom employ machinists and certainly do not sweat these women. In the wholesale trade the bulk of the "uppers" are made by operatives employed in small workshops under sub-contractors, persons who have never yet been accused of "sweating" their employees.* In the slipper-manufacturing industry, though in the making (*i.e.*, lasting and finishing) of inferior goods, foreigners are employed under sub-contractors, both they and their masters working during hours almost incredibly long for the most wretched pittance, yet the boys and women employed as sewers by the English workmen, who make the better class of "sew-rounds," are in every way well treated. I also came across "chamber-masters" (manufacturing complete boots) against whom no charge of sweating can by any possibility

* For an account of these upper-makers the reader is referred to the *Annual Report of H.M. Chief Inspector of Factories and Workshops for* 1887, pp. 101-103, where the remarks of Mr. Lakeman, Senior Metropolitan Inspector, upon the very small earnings of these sub-contractors may be noted. A case, in which I found upper-makers working under a piece-master, is referred to *ante*, p. 173.

be made; for Mr. K. McCrae, secretary of the Amalgamated Society of Boot and Shoe Makers, wrote to me (in 1888) in regard to these sub-contractors—

"These middlemen work for large shopkeepers, taking the work out in considerable quantities, and make it right out. All these middlemen pay the full scale of wages fixed by our first-class West-end statement. There are no complaints as to the way in which they treat their men. I believe that these middlemen get rather low prices from their employers, and do not earn large profits."

In the printing trade (as Mr. C. J. Drummond, then secretary of the London Society of Compositors, wrote to me in the same year) "weekly newspapers are not unfrequently 'farmed' by members of the Society, the farmer paying the full scale-price to the compositors engaged. In such cases the farmer takes the newspaper from the proprietor at a fixed price, engages his own compositors, and pays them, the proprietor being practically ignorant of the men employed. For example, *Lloyd's Newspaper*, *The Illustrated London News*, and *The Graphic* are farmed, all the compositors employed being members of this Society." Would it be accurate to speak of the compositors engaged by the farmers in these cases as sweated by these sub-contractors?*

Desiring to study the method of industrial remuneration adopted in the iron trade, I visited some extensive ironworks in the Midlands, belonging to an old-established company, which gives employment to

* Farming in the printing trade has, since the date of this letter, grown less and less common, and may now be said to be a thing of the past, so far, at any rate, as London is concerned.

nearly ten thousand men. Posted upon the office door I read a notice intimating that "Contractors will be furnished with change with which to pay their men." And I found that here, as is the case—I was told—in most similar establishments, almost every operation was performed under sub-contract. The puddlers employed their own "underhands;" the shinglers, the rollers, the mill-rollers, the saw-men, all employed their own assistants, varying in number from one to four. The sheet-mill was under a sub-contractor employing half a dozen subordinates; the hammerman had three; the iron-moulders, thirteen in number, were under a sub-contractor.* The coal was brought in, and the ashes removed, by sub-contractors; of whom there were in different departments numerous other varieties. Descending one of the mines from which the company obtains its coal and iron, I found that the minerals were got by miners, each of whom had under him from three to nineteen day-wage men and boys employed by him,† were carried to the pit's mouth by another class of sub-contractors and their employees,‡ and were taken thence to the railway trucks by the "banksmen," sub-contractors each of whom employs half a dozen

* See *Report on Wages and Hours of Labour*, 1894, p. 109.

† See the evidence given before the Labour Commission by Mr. T. Richards (*Evidence*, Group A., Vol. I., pp. 302, 303), and by Mr. J. P. White (*Ibid.*, p. 377), and *Report on Wages and Hours of Labour*, 1894, p. 96, also *Daily Chronicle*, September 26th, 1893.

‡ See the evidence given before the Labour Commission by Mr. W. Kerry (*Evidence*, Group A., Vol. I., pp. 445-449).

subordinates. Proceeding to the quarry from which the limestone used in smelting is obtained, I found that the work was carried on by sub-contractors in the manner described by Professor Cairnes (see *ante*, pp. 182, 183).

The existence of sub-contract in the manufacture of agricultural implements is referred to in *Old World Questions and New World Answers*, by D. Pidgeon, p. 283. In the ship-building industry sub-contract is widely prevalent, the merits of this method being set forth by Mr. Denny, of Dumbarton, in his *Worth of Wages* already cited, while its demerits are ably expounded in a paper by J. Lynch (*Report of Industrial Remuneration Conference*, pp. 114-116).*

That the investigation made by the Sweating System Committee embraced all the varieties, or was sufficiently exhaustive to afford a clear insight into the general operation, of the system of sub-contract, will scarcely be contended. Did space permit it, it would be easy to enumerate many further instances of sub-contract, which were never brought to the notice of

* See also Mr. Denny's letter referred to *ante*, p. 185 *n*. In ship-building yards, in which sub-contract prevails, the visitor will often be told that no work is done on sub-contract, the ground of this statement being, that all the men are borne on the books of the firm. But this fact has no bearing on the question. The leading member of each group will in these cases be found to be the only one who receives his pay from the firm ; he gets a lump sum, out of which he pays what he chooses to his subordinates, whom he possesses an uncontrolled discretion in selecting and discharging. These sub-ordinates are thus the employees of this leading man and not the employees of the firm. The system is clearly sub-contract.

the Lords' Committee; from the "butties" in mines,* sub-contractors who undertake to get the coal from a large part of a mine, to perform all the necessary operations required in working it, and to deliver it to the mine-owner at so much a ton, down to the innumerable sub-contractors to be found in all branches of the building trade;† to those in the cement trade along the Medway (in which the "burning" and "grinding" are done under the method of sub-contract); to the pressers and basters in the London mantle factories, who are allowed to pay their own assistants; to the women in match factories, who pay their own helpers; to the "minders" in the Lancashire cotton-spinning trade, who always engage and pay their own "piecers;" and so on, almost *ad infinitum*.‡

Sub-contract, in fact, is practically ubiquitous. The ideas, which occupied so prominent a place in the agitation against "the sweating system," that sub-contract was a special, exceptional, and universally oppressive method of industry, and that the whole, or a large part, of the phenomenon known as "sweating" was due to the fact of the "sweatees"

* See the evidence given before the Labour Commission by Mr. John Weir, secretary of the Fife and Kinross Miners' Association (*Evidence*, Group A., Vol. I., p. 221); and compare *Labour Gazette*, August, 1895, p. 252.

† Sub-contract in the building trade is in the United States called "lumping;" see *New York Herald*, April 1st, 1893.

‡ As to sub-contract in the pottery trade, see *The Economy of High Wages*, by J. Schoenhof, p. 187.

being employed under this peculiar and sinister "method," are, in the main, unfounded. Nor could it be expected that, upon the correctness or incorrectness of these ideas an adequate amount of light could be shed by an inquiry which, while it called for evidence of those cases only in which sub-contractors were alleged to ill-treat their work-people, not only consistently, and, on the whole, successfully, endeavoured to exclude from investigation those numerous cases in which sub-contract exists without any trace of sweating, but also did its utmost to avoid embracing in its scrutiny all cases in which large manufacturers, not called "sub-contractors," oppress and underpay their employees. That the rejection of evidence in favour of good sub-contractors and against bad manufacturers was the necessary consequence of the form taken by the reference to this Select Committee, is possible. But, in any case, this rejection inevitably detracted in a large measure from the value of the evidence collected by this body, considered as material for the scientific study of methods of industrial remuneration.

Sub-contractors, it is fully admitted, often treat their employees in a manner of which these work-people complain, and frequently complain with justice. But the improper treatment of employees is not a monopoly of any particular class of employers; and it is indeed, extremely doubtful whether the number of persons sweated by sub-contractors is appreciably greater than that of those undeniably sweated by employers to whom this name is never

given. All the same, there exist in relation to sub-contract certain circumstances which go far to account for the strong aversion entertained by a large section of the working-classes to this "method" of employment. The nature of these circumstances will be considered in the following chapter.*

* On the subject of "the sweating system," see also *Journal of Social Science* (American Social Science Association), No. XXX., October, 1892, pp. 57-72; *Report on the Sweating System*, by Horace G. Wadlin, transmitted to the Senate and House of Representatives of Massachusetts, March 17th, 1893; *Report on the Sweating System* of the Committee on Manufactures of the House of Representatives, Washington, 1893; and *Report upon the Sweating System in Canada* 1896.

CHAPTER XV.

OBJECTIONS ENTERTAINED TO THE "METHOD" OF SUB-CONTRACT; "THE SWEATING SYSTEM."

THE aim of the present chapter is to consider the objections advanced to the "method" of sub-contract, and, in the first place, the reasons, which have caused this "method" to be so generally identified with that "system" of industrial organization which is designated by the opprobrious title of "the sweating system."

In passing, we may examine the meaning attached to this term, "the sweating system," by those who do not confine its signification to sub-contract.

Omitting all reference to the earlier agitation against the sweating system (in 1848 and a few subsequent years) we find in Crompton's *Industrial Conciliation* (1876), p. 12, "The strike of the cabinet-makers . . . was to maintain the true piece-work system, to prevent the introduction of the lump or sweating system." This "lump" system, explained *ante*, pp. 74, 75, has, of course, nothing to do with

sub-contract. Turning to the evidence before the Sweating System Committee we find one case adduced by a witness in the tailoring trade, in which the method described as an instance of the sweating system consists in the sub-division of labour, different parts of a garment formerly made throughout by one man being now given out to be made by several operatives (Vol. I., p. 394); another "system," to which this witness applies the name of the sweating system, consists in the employment of women to do work formerly done by men (*ibid.*, p. 393). Another definition appears in the *Report as to the Condition of the Nail-makers and Small Chain-makers in South Staffordshire and East Worcestershire*, by Mr. Burnett (1888): "This master gives work out to women at less than list prices, which is here considered a form of the sweating system" (p. 39). That is to say, if an employer, no matter under what method his workpeople are employed, declines to pay the full rate of wages fixed by the workmen in agreement with the general body of masters, he is said to employ his operatives "under the sweating system." A wider definition still was given to the Committee by Mr. Parnell, secretary of the West End Branch of the Alliance Cabinet-makers' Association, who, when asked what he understood by the expression "the sweating system," replied—

"What is usually meant by the sweating system I think does not at all convey the correct idea of what sweating really is. The sweating seems to convey an idea to the generality of the public that it only exists where such bad wages are earned, that the individual who is sweated can scarcely live upon them, but in our opinion (I am speaking for my fellow-workmen) that is not the idea which we have of sweating.

We consider sweating to be the taking out of any undue profit from work that would otherwise go, or that could otherwise be applied, to the labour put in that work" (Vol. I., p. 279).

Wider still is the definition given by another working-class witness, who says: "My definition of a sweater would be a person that lives on the labour of other persons; whether he takes work and sub-contracts that work, or whether by any other means he manages to live without working, I call that person a sweater" (Vol. I., p. 391).

Widest of all was the definition given by Mr. Arnold White, to whose untiring zeal in getting up the case and bringing forward evidence on behalf of the prosecution the Committee was so deeply indebted. When requested to define the sweating system, Mr. White answered: "I think it is impossible to give a scientific definition of the term, but it involves three ideas which are sufficiently distinct. The broadest definition that I can give of a sweater is one who grinds the face of the poor; the second is that of a man who contributes neither capital, skill, nor speculation, and yet gets a profit; and the third is the middleman" (Vol. I., p. 35).

So much as to the vagueness of the term, "the sweating system," as it is commonly used; its signification, as will be seen, being far wider than the narrow limits of sub-contract, and extending beyond the confines of our present subject—the method of industrial remuneration. In the pages which follow an attempt will be made to consider the nature of the evils incidental to "the sweating system" so far only

as the set of industrial facts referred to under this name are coincident with a particular method of remuneration, so far, that is to say, as "the sweating system" is coincident with the "method" of sub-contract.

What, then, is the method of industrial remuneration and organization denoted by the term "sub-contract?" If you ask the man in the street what he means by "the method of sub-contract," he is pretty sure to reply—"Oh, the sweating system, of course. Suppose a master tailor gets the cloth for a coat cut out on his own premises, and then sends the stuff out to a middleman to be made up: that is sub-contract." To begin with, *locus in quo* has nothing to do with the matter; for the clothier may quite well have his sub-contractor on his own premises, as was the case in regard to the sub-contracting tailor, Poswa, already (*ante*, p. 192) mentioned (*Sweating System Report*, Vol. I., pp. 924-925). But, whether he be a "sweater indoors" or a "sweater outdoors," what is it that makes a man a sub-contractor? What, in short, distinguishes this "middleman" from all other kinds of employers? Keeping to our concrete facts, let us inquire into the whole history of this coat, and see at what point the sub-contracting comes in. A "middleman," it is conceived, is someone who comes between the "producer" (by which is generally meant the workman who performs the manual labour necessary to the production of any article) and the consumer, who uses this article. Now, as to this coat, presumably we begin with the manufacture of the

cloth; though it is hard to see why we should not begin with the growing of the wool. However, we will consider the first step in the production of this coat to be that the cloth manufacturer sets to work to turn the wool into cloth. The first thing that the manufacturer does with his wool is, in all likelihood, to send it out to a sub-contractor to be combed and spun. He gets it back as yarn, and weaves it; then he probably gives it out to yet another sub-contractor to be dyed and finished. Then the stuff goes to the London woollen-draper, who promptly passes it on to a cloth-worker to be examined and shrunk. After this, the cloth is sent by the woollen-draper to the master tailor, who, as we are now supposing, gets the cloth cut out by his own cutter, and then sends the pieces to a sub-contractor (a "sweater") to be made up. Now, for what reason is it that the last alone in this chain of sub-contractors is spoken of as a middleman and abused as a sweater? Why is it that the employees of this sub-contracting wool-comber and spinner, and of this sub-contracting dyer and finisher, and of this sub-contracting cloth-worker are not supposed to be employed under the peculiar "method" variously termed "sub-contract" or "the sweating system," while the employees of the sub-contracting coat-maker are invariably spoken of as being so employed?

Take, again, the cotton linings of our typical coat. These the master tailor orders from Jones in London, who gets one hundred pieces at a time—say sateens—from Brown & Co. of Manchester, Brown & Co. getting

these from Smith, a large merchant in that city. And how does Smith get the stuff? He goes to Doe & Co., and orders them to make him one hundred pieces of "grey cloth;" these manufacturers then probably order the necessary yarn from Roe Brothers, and having got it, proceed to weave it. Smith, having now got his grey cloth, proceeds to send it out to Dobsons, Limited, to be printed. Very possibly, Smith will also send the printed cotton out to Rawson to be "beetled." Smith then delivers the finished goods to Brown & Co., who send up the sateens to Jones, who sends on his sateen to our master tailor; whereupon the stuff goes out with the cloth to the "middleman" to be made up "under the sweating system." Does it not seem somewhat capricious to speak of the employees of this particular sub-contractor (the "middleman" coat-maker) as being employed under a special and obnoxious "method" of industry absolutely distinct from the method under which the workpeople of the other sub-contractors in this chain are employed—*e.g.*, the employees of Roe Brothers, and of Dobsons, Limited, and of Rawson? If "sub-contract" necessarily involves "sweating," why is it that no one would think of saying that the employees of Roe Brothers, and of the rest of these sub-contractors are employed "under the sweating system" or of alleging that these operatives are "sweated?"

To take one final concrete instance, why is it that, if Messrs. Maple in the Tottenham Court Road, buy a carpet from Messrs. Crossley at Halifax in order to sell it again, that carpet is not said to be made

"under the sweating system," while, if Messrs. Maple buy a stock side-board from a "garret-master," or, as he would correctly call himself, a "cabinet-maker to the trade" in Bethnal Green, that side-board is said to be made "under the sweating system?"

The more one examines the facts in regard to "the sweating system," the more difficult it becomes to believe that "the sweating system" as a system, *i.e.*, a method of industrial organization, has any existence whatever.

"Sweating"—sweating of the most deplorable character—is widely prevalent. No one who possesses the slightest degree of acquaintance with the facts of industry will deny that the conditions, under which a large number of working-men and working-women exist, are inhumanly oppressive. Overworked to the utmost limit of endurance, remunerated by wages just—and only just—sufficient to stave off starvation, these miserable people drag out, often in the most noisome and stifling dens, a life immeasurably inferior in point of comfort to that of negro slaves.

"Sweating" exists; but sweating is not coincident with any circumstances to which can properly be given the name of an industrial method. The attempt to classify these circumstances as a "system" is misleading. The employers, who sweat their hands, do not employ these hands under a peculiar method. All the same, certain circumstances do most powerfully make for sweating; and employers of a certain class are specially prone to exhibit in the treatment of their workpeople a well-defined form of oppression.

What these circumstances are, we will proceed to consider.

Sweating may be taken to denote in particular three more or less distinct kinds of ill-treatment. A worker is sweated (1) if he is grossly underpaid; (2) if he is employed during unconscionably long hours; (3) if, whether the period of his employment be long or short, and even if his wages be not extremely low, he is compelled to tax his powers to an unreasonable extent. Now, as to under-payment, no one acquainted with the facts would ever suggest that there is much to choose between one class of employers and another. No doubt, unskilled and unorganized labour receives in many cases from "sub-contractors" a very low rate of remuneration; but can anyone assert that the unskilled and unorganized operatives employed by large firms, directly, without the intervention of any "sub-contractor," are appreciably better off? It may be admitted that the operatives engaged in factories belonging to the wholesale houses are, in many industries, better treated than those employed by sub-contractors. But the reason of this is, not so much that large employers are especially humane, as that the work, which is reserved to be done in the factories, is relatively high-class work, which must be done by skilled hands, whom their masters would find it difficult to replace, and whom they therefore treat with politic consideration. Most of the inferior work is given out at very low prices to sub-contractors; but in many cases the very worst paid work of all—work

which no sub-contractor can be found to take—is given out to out-workers employed directly by the wholesale firm, people whose earnings are the very lowest in the whole trade. Proof of the truth of this assertion is hardly to be looked for in the evidence before the Committee on the Sweating System, since the large employers enjoyed, as already observed, a fortunate immunity from investigation by that tribunal. But truth has a way of leaking out; and, accordingly, if we turn to that evidence, we find that in regard to the tailoring trade Miss Beatrice Potter (Mrs. Sidney Webb), who has herself worked in some of the lowest sweating dens under "sub-contractors," told the Committee, in relation to what she rightly calls "the very lowest layer of the coat trade"—

"That work is done by women and men at their homes; it really does not pay the contractor to take it out. That is the sort of coat that is done for 7*d* or 8*d*; it hardly pays the Jewish contractor to take that coat out, so that it is done to a great extent by Gentile women. That is the very lowest work; and that is what I mean by saying that sweating, in its most intense form, has nothing whatever to do with the contract system. In fact, the contract system is the top stratum, as it were, of the trade. It [the very lowest work] is taken straight from the wholesale houses. They [the women who do this work] earn the lowest wage in the coat trade" (*Report*, Vol. I., p. 321).

In the Midlands, also, as proved by Mr. Hoare, a factory inspector, the lowest and worst paid work is, not that which the sub-contractors undertake, but that which is given out directly to out-workers by the wholesale houses. For instance, a woman thus employed gets 6½*d* per pair for making moleskin trousers, finding her own machine, needles, and

thread, this last item costing her $1\frac{1}{4}d$ per pair, and carrying from and to the warehouse bundles weighing twenty-four pounds each. "We have to walk five miles for each lot of work, and lately we have had to go nearly every day, and sometimes twice a day, and when we go, we often have to wait many hours before we can get any."

Apart altogether from the revelations made by this Inquiry, the manner in which eminent wholesale houses deal with their workpeople is, now and then, accidentally brought to the notice of the public. At an inquest held in Manchester it was proved that a very large firm (which has establishments in that and three other towns) paid to its out-workers $10d$ per dozen for "making" (query, machining?) shirts—shirts with a pocket and a narrow lining at the back. From a statement made a few years ago by the Rev. Henry Williamson, president of the Dundee and District Mill and Factory Operatives' Union, in regard to a spinner thirty-two years of age, who had learnt the trade when nine years old, we find that

"She was making the magnificent sum of 6*s* 10*d* per week, and was supposed to live on 7*d* worth of bread a week, taking peasemeal for dinner every day, except when she varied the diet with a half-penny worth of broth out of a coffee-house. When eggs were cheap, she generally partook of an egg; an ounce of tea and a pound and a half of sugar had to last her a week."

The fact is that no one, who is acquainted with the rate of remuneration received by the less skilled among our wage-earners (such as scavengers, many minor classes of clerks in warehouses, and female operatives in many trades, especially women employed

in sack-making, rope-making, shirt-making, &c.), will think of asserting that it is small employers of the class known as sub-contractors, who alone, or chiefly, are addicted to the payment of very low wages.

As to long hours of employment, it is scarcely necessary to adduce instances of the cruel length of the tasks exacted from their workpeople by large employers, in cases in which the *vis major* of the Factory Acts does not make such treatment impossible. The deplorably long hours, during which many employers carrying on business upon a very extensive scale have been accustomed to employ men such as, for example, omnibus* and tramcar drivers and conductors, railway servants, shop assistants, &c., are too well known for the facts to need detailed statement in this place. To contend that it is "sub-contractors," who alone, or chiefly, sweat their employers by overworking them, would be out of the question.

When we come to the third kind of ill-treatment above specified, that which consists in the exaction of an unreasonable degree of exertion—"nigger-driving" —then we do, indeed, discover that this important form

* It is worth noting that during the omnibus strike of June, 1891, it was made clear that the small omnibus proprietors treated their men much better, in the matter both of hours and of pay, than the big companies. See the facts stated by Mr. H. H. Champion in *Pall Mall Gazette*, June 4th and 12th, 1891. My own inquiries tend to prove the truth of Mr. Champion's statements. In the same way it was shown at the time of the Dock Strike in 1889 that the men employed by the small wharfingers were better off in every way than those employed by the two large companies managed by the Joint Docks Committee.

of sweating is in a marked degree more prevalent among "sub-contractors" and other small masters than among large employers. In order to explain this, let us go back to our typical coat. If we were to watch the wool and cotton from the bale onwards, we should find that the superintendence of the operatives employed in the different processes of manufacture is delegated to foremen, &c., few of whom are paid by results. But the remuneration of the "sub-contractor," who gets the coat made up, is strictly proportionate to the intensity of exertion which he is able to induce his workpeople, working under his immediate personal superintendence, to maintain. He may possibly employ a foreman on time-wage; but that is rare; and even so, he will trust little to the supervision of his foreman. For the most part, the "sub-contractor" will keep each and every one of his employees under his own close and rigid supervision. Such being the case, it is practically certain that the workpeople employed by the sub-contracting coat-maker will be subjected to a degree of pressure far more severe than is at all likely to be found present in the factories of the big manufacturers by whom the cloth and the lining stuff were produced, and it is very probable that this pressure will be carried to the point of oppression.

It must be added that, while the "sub-contractor" is much more prone to "drive" his workpeople than is the average big manufacturer, it is also the fact that, the smaller the scale upon which the "sub-contractor" works, the worse, as a rule, will be the

conditions of employment. While, as Mr. Burnett said in his *Report on the Sweating System in East London*, "the larger workshops tend to approximate to the factory system (p. 1), and while "the larger sweaters have not only better but more regular work, with higher prices," on the other hand, the smaller "sub-contractors" are stated to "do the commonest work, have the lowest prices, pay the least wages, and exact the *maximum* of toil from their workers" (*ibid.*, p. 15).

The reasons which account for the fact, to which attention is now directed, are not far to seek. Given a team of workers, most of whom are very deficient in skill and devoid of habits of discipline, such as, for example, a gang of "greeners" (newly-arrived foreigners), the labour of these men can only be used at all, and can only be made to yield even the most meagre "wages of superintendence," if the superintendence exercised be of the most stringent character, and such as it is practically impossible for the "sweater" to exercise over more than a very small number of subordinates. This is why the lowest class of labour gravitates to the little "sweating-dens," and why the little "sub-contractor" is very often so harsh a task-master. On the other hand, where his workpeople are fairly skilled and less undisciplined, the "sub-contractor" finds it possible to supervise effectively the labour of a relatively numerous group of assistants. And while the large "sweater" is, under these circumstances, under no necessity to attempt to exercise the same extremely stringent

superintendence as the small "sweater," the very number of his workpeople makes it impossible for their master to "drive" them by the same minute and incessant supervision which the small "sweater" bestows upon every member of his small gang; and, at the same time, the skill, which these operatives possess, is sufficiently scarce to make it certain that their employer will not dare to risk the loss of their services by indulging too freely in any bullying practices.

To revert to our concrete instances. The essential difference between the employer, who makes the carpets bought by Messrs. Maple for re-sale, and the employer, who makes the stock sideboards bought by Messrs. Maple for re-sale, lies in the fact that the carpet manufacturer is a large employer, who employs his workpeople under time-wage foremen, superintendents who have no special motive for "driving" their subordinates, while the "cabinet-maker to the trade" is a small employer who looks after all his workpeople himself, and whose remuneration depends to a great extent upon the degree of ability which he displays in compelling these workpeople, by means of incessant personal supervision of a very stringent character, to do sixpennyworth of work for fivepence. This is the reason why the maker of these cabinets—although he is certainly not a sub-contractor—is often called by that name, and why this "garret-master" is invariably said to employ his men "under the sweating system."

The objectionable characteristics so often found in

the "sub-contractor" have, it is abundantly clear, but little connection with the "method of sub-contract;" they have, that is to say, very little to do with the fact that this "middleman" does not himself sell to the general public the goods which his workmen make. To refer, again, to the tailoring trade, it is certain that the conditions of employment are in every respect as oppressive in the workshops belonging to small retail shops as in those of the sub-contractors (the men who take work to get it done for the wholesale firms). Miss Potter (Mrs. Sidney Webb), whose knowledge on this subject is beyond question, expressly declares that, "undoubtedly the worst paid work is made under the direction of East End retail slop-shops or for tallymen—a business from which contract, even in the equivocal form of wholesale trading, has been eliminated."* What is here said of the small tailors is equally true of a large number of other little shopkeepers manufacturing and selling directly to the public goods of a low class, and of other petty employers of all kinds. These little masters and mistresses, none of whom can by any conceivable straining of this very elastic term be said to work "under the sweating system," frequently sweat their hands to a deplorable extent.

The true inwardness of the offence laid at the door of the so-called "sub-contractor" consists in his being a small employer, and as such being remunerated by

* *Life and Labour of the People*, first edition, Vol. I., p. 237.—"The tally-man takes orders direct from the actual wearer, and is paid for the garments in small instalments" (*Ibid.*, *n.*).

profit. This objection is identical with that taken to the method of piece-wage foremanship,* which any working man will tell you is another form of "the sweating system." The gist of the whole matter is that the working-man, who complains of work being done under the "method" of sub-contract, complains because the work might be, and is not, done under a foreman or other superintendent remunerated by time-wage, and, for this reason, free from any strong incentive to bully the subordinate workers into over-exertion. The essence of the "method" of sub-contract is the supervision of labour by a person remunerated by piece-wage or profit.

Put in this way, the objection to work, which might be done under a time-wage foreman, being done under a small employer, must be deemed to be deserving of the most attentive consideration. That a man should do "a fair day's work for a fair day's wage," is right; but that he should be hustled into working at a speed incompatible with his reasonable comfort and often with his health, is a grievous wrong.

Of course, the very valid objection, which exists to "sub-contract," is not always put in this way. Sometimes the sub-contractor is represented as an idle man, who makes a big profit "out of the labour" of his employees. But the sub-contractor is, in most cases, anything but an idle man. The large sub-contractor may, indeed, do no work with his hands. All the same, unless we are prepared to maintain that no activity other than actual manual labour is worthy to be

* See *ante*, Chapter XIII., pp. 166-179.

dignified with the name of "work," we must admit that the work of organizing the labour of operatives, many of whom are deficient in skill and in habits of discipline, is quite as hard work as any manual labour, especially when, as is often the case with work done under sub-contractors, a minute sub-division of labour is practised. Nor, after the evidence which, since the commencement of the agitation against "the sweating system," has been produced both by witnesses before the Select Committee and by independent and impartial investigators, such as Mr. Charles Booth,* can it be contended that the profits made by most sub-contractors are out of proportion to the value of the services which they render. As Miss Potter (Mrs. Sidney Webb) told the Lords' Committee, "where a sweater makes a profit, it may be taken, as a general rule, that he pays his hands well. In the lowest class of work he makes, I consider, less money than his machinists and his pressers" (*Report*, Vol. I., p. 332). And this observation is confirmed by the evidence given by Mr. Burnett, who said: "In very many cases (and I have not the slightest doubt that it is absolutely true) the master-sweaters will tell you that they themselves receive less money at the end of the week than their own workers" (*Report*, Vol. I., p. 532).† These remarks

* *Life and Labour of the People;* see especially Vol. I. (first edition).

† So again, in his *Report on the Sweating System in East London* (p. 15), Mr. Burnett says that "the lower-class sweaters . . . make little more than a bare subsistence, and earn little, if any, more than

relate to the tailoring trade; as to the gains of the sweating-masters in the boot-trade (who, in this case themselves performed the more difficult part of the work), I refer the reader to my paper on that industry in *Life and Labour of the People*, Vol. I. (first edition); adding that it is within my knowledge that, since the abolition of sub-contract in this trade, the ex-sweating-masters have in some instances earned in wages as ordinary workmen at a rate at least as high as when they were small employers, remunerated by profit. In some instances, indeed, the weekly earnings of sub-contractors, whose accounts I investigated in the course of my inquiry into the boot trade, were so extremely meagre that I could only explain their preferring the position of employer to that of employee by the fact that the work of the sub-contractor is less irregular than that of his subordinates, who are taken on or discharged according as he has work enough to employ a large or small staff. Thus, a sub-contractor might receive less money at the end of the week than his assistants, but might earn more in the course of the year.

Although the real gravamen of the charge against the sub-contractor is, not so much that he makes a big profit, as that he is an employer remunerated by profit instead of a foreman remunerated by

the best of their own workpeople." Compare the remark of Professor Marshall: "The small so-called 'sweater' or 'garret-master,' who takes out a sub-contract at a low price, will often work harder than the ordinary workman, and for a lower net income" (*Principles of Economics*, by Alfred Marshall, second edition, p. 641).

time-wage, yet there can be no doubt that there are many cases, in which the gains of the sub-contractor are simply the spoils of flagrant exploitation, no work, or none, at any rate, useful and necessary, being performed in return for these ill-gotten profits. The sub-contractor in the docks, in the days before the Dock Strike of 1889, may be admitted to have given to the dock directors full value in the shape of vigorous slave-driving for the money which he earned; but was so great and expensive an amount of slave-driving required? and can it be said that these cruel task-masters were fairly entitled to their earnings? So long as the companies encouraged, as was the case in certain docks, the employment of the scum of the labour-market, the slave-driving sub-contractor may have been a necessity. But that, given a set of men willing to do a fair day's work without any such oppressive supervision, the sub-contractor can, in some cases, advantageously be eliminated from the organization of industry, is a proposition, which it does not seem unduly bold to advance, and the truth of which the success of the system of co-operative work adopted in the Burntisland docks, which has been described in a preceding chapter (see pp. 163-165) tends to demonstrate.

To what extent it may be practicable to abolish the method of piece-work, or payment by results, as applied to the remuneration of the leaders of industrial groups, is a question, in regard to which it would savour of presumption to express too dogmatic an

opinion. As has been shown, the essence of "the sweating system" consists in the stimulus given to the immediate superintendent of labour by making his earnings proportionate to the vigilance and severity of his supervision. If it were possible to replace every superintendent remunerated in this manner (whether small employer, sub-contractor, or piece-master) by a superintendent remunerated by time-wage or salary, irrespective of results, then we should have entirely done away with "the sweating system." The difficulties in the way of a change such as this are, undoubtedly, of a grave nature. If the remuneration of the superintendent of labour be made wholly independent of the results obtained by the efficiency of his supervision, then, as has already been pointed out, is it not probable that, in many cases, the work of superintendence will be done in a very inefficient manner? And is there not a type of working-man incapable of producing a reasonable amount of output except under supervision of a somewhat strict nature? Again, if you allow your time-wage foreman, who will no longer have a direct interest in giving preference to the most active and intelligent workmen, to select and discharge the subordinates, will he not exhibit an interested favouritism? And yet, are there not many instances in which, for practical reasons, it is necessary to leave the selection, and (to a great extent) the discharge, of the operatives to the foreman? Even in regard to work done on the premises no one is so capable of performing these duties with efficiency as the foremen; and in respect to an out-

lying job the difficulty of interfering with the discretion of a foreman in command of a group mainly composed of local workmen, engaged for the occasion, is almost insuperable. In any case, if the subordinate operatives are employed on piece-wage, will it not often occur that, when business is not at its briskest, those operatives only will obtain a full share of work who are willing to ingratiate themselves with the foreman?

It is clear that, although the foreman, who is paid a salary irrespective of results, is unlikely to be guilty of the cruel severity exhibited by the slave-driving piece-master or sub-contractor, yet the financial exploitation of the workmen may be carried out, not only by the sub-contractor who pays starvation wages to his employees, or by the piece-master who insists on sixpennyworth of work being done for fivepence, but also, to some extent, by the time-wage foreman who exacts bribes from his subordinates;* and that the mere substitution of salary for profit or piece-wage as the remuneration of the superintendent of labour will not of itself suffice to procure the complete abolition of all those grave industrial evils which we

* To how great an extent the bribery of time-wage foremen prevails, it is not easy to say. In the East London tailoring trade the "taker-in," who is employed by the manufacturer to give the work out, is usually, if not invariably, allowed to exercise an absolute discretion as to which sub-contractors shall be employed, and is often bribed by men anxious to secure the work. Journeymen in the West-end declare that the cutters of the master tailors receive similar propitiation; and like allegations are made in regard to foremen in charge of building jobs.

associate with the name of "the sweating system." It is, none the less, beyond question that many cases exist, in which the replacement of the sub-contractor and of the piece-master by a foreman remunerated either by a simple time-wage, or (under the method of progressive wages) by a time-wage supplemented by a premium proportionate to results, but not large enough to tempt him to abuse his position by anything in the nature of "nigger-driving," is highly desirable. At the same time, it is possible that, as combination and association extend their influence, all persons who exercise supervision over the performance of labour, whether they be foremen or employers, and whether remunerated by salary, by piece-wage, or by profit, will to an increasing extent find their action regulated in the interests of the subordinate workers by either of the two great sister forms of democratic control—Trade Unionism and Co-operation.

CHAPTER XVI.

THE RELATION BETWEEN TRADE UNIONISM AND CO-OPERATION, SO FAR AS CONCERNS THE METHOD OF INDUSTRIAL REMUNERATION.

That the position of the working-man under the existing wage-system is one, which in many important respects leaves much to be desired, few of us will feel inclined to deny. The two great movements, which have been initiated among the working-classes with the view of improving their position, are the Trade Union Movement and the Co-operative Movement. But with Trade Unionism the limits of our present subject make it impossible to deal in these pages. This is a point which it is desired to bring out with clearness; because, in default of explanation, the absence of any treatment of Trade Unionism might be misunderstood.

The subject of this book is the method (as distinguished from the other elements, *e.g.*, the amount) of industrial remuneration. Now, in regard to the method of industrial remuneration Trade Unionism does not propose to make any change whatever in the

arrangements at present prevailing. Co-operation, on the other hand, embraces in its various forms all the attempts which have been made with the view of superseding, wholly or partially, the existing wage-system by novel methods of industry. Co-operation, therefore, will be discussed with all necessary fulness of detail. But, by way of preface to the chapters which will treat of Co-operation, a few remarks are now offered upon the relation between the leading ideas which lie at the root of the Trade Union Movement, on the one hand, and the Co-operative Movement, on the other.

So far as concerns the remuneration and the organization of industry, the leading ideas of Co-operation are (*A*) that each group of workers is to be associated by their own free choice, (*B*) that these associates shall work under a leader elected and removable by themselves, and (*C*) that the collective remuneration of the labour performed by the group shall be divided among all its members (including this leader) in such a manner as shall be arranged, upon principles recognised as equitable, by the associates themselves. Of these three leading ideas the first two will be found partially, the third entirely, coincident with the essential elements of Trade Unionism.

(*A*) The idea of the voluntary association of the members of each group involves two points; (1) that no man shall be obliged to enter any group except of his own free will, and (2) that no group shall be obliged to accept as a member any man with whom the other members of the group object to work.

(1) As to the first point, Trade Unionism and Co-operation are absolutely identical in aim. It is obvious that in all cases, in which the number of applicants for work is not considerably in excess of the number of persons for whom work can be provided, the determination of the question whether a given man shall, or shall not, seek a place within a given group of workers, rests with this man himself. The trade union ideal undoubtedly is so to diminish the number of the unemployed that "instead of one man running after two masters, two masters shall run after one man." If this ideal is attained, it is clear that no man will be forced into entering a workshop against his will. (2) With regard to the second point, the aim of Trade Unionism, in nearly all trades, ever since trade union combination first came into existence, has been to obtain for the workers the power of rejecting, as associates, persons who, on one ground or another, may be considered to be ineligible as fellow-workers.* While each trade union exercises the right to exclude from its ranks any persons whom it may consider undesirable as associates, the trade unions very frequently do their best to prevent

* Thus, employers have not infrequently been compelled by trade combination to abstain from employing female labour. In a recent case (see *Allen* v. *Flood*, decided in the House of Lords and reported in *Times*, December 15th, 1897, the boilermakers' trade union informed a ship-repairing company that, unless two shipwrights who had—in another yard—done work considered by the boilermakers to "belong to" them, were discharged, the boilermakers would leave their employment; the company found themselves obliged to cease employing the two men objected to.

their members from being compelled to work in the same shop with non-unionists.* In some trades the members of the trade unions decline to admit into the society any person who has not served a regular apprenticeship or spent a specified time as a learner; while in many industries the trade union forbids the employer to take learners except on condition that the ratio of boys to adults shall not exceed a specified proportion. With the question of the rightness or the wrongness of such action on the part of the trade unions we have nothing to do on this occasion. What we have to note, is that, for all practical purposes, the men employed in a factory, over which the trade union has a good hold, possess to a large extent that power of rejecting as fellow-workers persons who appear to them to be undesirable companions,†

* Even if a man belong to the trade union, yet, if he fail to comply with the regulations of the union, and if the union is a powerful organization, the employer will find himself unable to compel his workmen to accept the offender as an associate. Thus we read—"The masons' strike at Sheffield was settled yesterday. It originated through Messrs. Longden and Son, a well-known local firm, refusing to discharge a man who was in arrear with his subscriptions to the local union. All the other men engaged upon the contracts of the firm thereupon struck. Messrs. Longden yesterday discharged the defaulting member of the union, and shortly afterwards he paid up his arrears of subscriptions. The men resume work this morning" (*Daily Chronicle*, June 17th, 1891).

† In some instances the exclusion of particular classes of workmen is directed against those who have worked in a particular workshop. Thus, I am informed on good authority that, in a boiler-making establishment in which the trade union is strong, it is impossible to introduce a man who has learnt his trade in a particular factory with which the trade union has for a long time been on unfriendly terms.

which they would possess if the voluntary association of co-workers involved in the ideal co-operative method had been adopted *eo nomine* in regard to the organization of their labour.

(*B*) With respect to that other principal object of Co-operation, the control by the workers of the leading man under whom they are at work, it should be recognised that this object is, in a great measure, attained by the action of trade unionism, in all cases in which trade combination is sufficiently vigorous and effective. In the case of the printing trade we find that in all houses adopting the regulations of the powerful London Society of Compositors each group of workmen enjoys the right of appointing its own foreman, subject to the veto, on reasonable grounds, of the employers. The "clicker" thus appointed is the recognised intermediary between the master printer and the "companionship"; his actions are under the control of his companions, by whom he is remunerated on such terms as may be mutually agreed upon. As a rule, however, the control exercised in a well-organized trade is exercised, not directly, as in the case just mentioned, by the group of workmen working under the foremen, but by the general body of men in the trade union. This result may be achieved in either of two ways. Either the foremen, overlookers, &c., may themselves be brought within the authority of the trade union, as is already the case in some trades, and as may hereafter, if Trade Unionism increases its influence, be more and more frequently

the case;* or the trade union may, as it does in some trades in which the combinations of the workers are thoroughly efficient (*e.g.*, in the cotton-spinning industry), compel the employers to reprimand, and, if necessary, to discharge any foreman, overlooker, &c., found guilty of ill-treating the subordinates. With regard to the control exercised by or on behalf of each industrial group over its supreme chief, the fact, that the trade unions aim at, and to a considerable extent succeed in, preventing the employer from being to more than a certain inevitable extent "master in his own workshops," is too well known to require proof. This object of Trade Unionism may be carried out in either of two ways, by the direct operation of the men's combination, or by the use of the political power possessed by its members. As an illustration of the former class we may take the case of Strike No. 212 in the Board of Trade *Report on the Strikes and Lock-outs of* 1888. Here the employers tried to introduce a new lamp; the miners objected, and, being a strong body, compelled the company to accept a modified lamp, of a form approved of by the men (pp. 51 and 89).† An example

* Note, for example, the attempt made by the London dockers to compel the foremen to join their union, and that made in Australia to federate the officers of vessels with the organizations of the ordinary seamen.

† In cases in which strong trade unions exist, even so important a question as what work shall be done by a particular set of men is one, which the workmen do not permit their employer to decide; thus,

of the manner, in which legislation promoted by trade unionists restricts the liberty of the employer, is afforded by the Acts regulating the amount of moisture to be allowed, the temperature to be maintained, and the provision for effective ventilation to be made in cotton-weaving sheds. It is not suggested that anything like the desired amount of control over employers, foremen, &c., has as yet been obtained for the workers by the power of trade union combination. All that it is intended to point out is, that this principal object of Co-operation is aimed at by the essential principles of Trade Unionism; while, that, in cases in which the union is really strong, it is practically possible for this object to be achieved by Trade Unionism, almost as fully as by Co-operation, no one with any experience of the power exercised by an efficient trade union organization will deny.

(*C*) We come now to the third of the objects which Co-operation has in view—the apportionment between all the members of an industrial group of the wealth in the creation of which their joint labour is engaged, the share allotted to each member being fixed by the group in the interests of the group. This aim of Co-operation is at the same time the aim of Trade Unionism. But in regard to the means, by which this

we have had numerous instances of "demarcation" disputes (*e.g.*, between ship-joiners and carpenters, between fitters and plumbers, &c., &c.), strikes having in these cases taken place because one set of men has accused another of doing work which it claimed to "belong to" it, and the employers being obliged to allow the men to settle or themselves what work each class should do.

aim is to be attained, the co-operators differ widely from the trade unionists.

The identity of the objects aimed at by Trade Unionism and by Co-operation, though formerly often ignored by both parties, is now plainly recognised by the co-operators; as is shown by the remark made in the Report for 1891 of the Co-operative Aid Association, "The trade union movement is a branch of the co-operative movement. It substitutes collective control for despotic management, and it shares out in the shape of wages among its members what without it would go as profits to the employers."

The close resemblance, which exists between the aims of Co-operation and Trade Unionism, and the divergence as to means, which distinguishes these two rival agencies, may be illustrated by comparing the system (described above, pp. 163-165), under which the work of loading vessels with coal is carried on at Burntisland by a co-operative group, with the trade union system, which has for a long time been in force in relation to the work of the stevedores in the Port of London.

With comparatively few exceptions, all the London stevedores, including the foremen, belong to the trade union, by which the relations between the stevedores and their employers (the master stevedores) are effectually regulated in accordance with the rules of the union—rules which specify the wages to be paid, the intervals to be allowed for meals, and so on. If in any given case fewer men are taken on than are fairly required for the job, the matter is at once dealt with

by the trade union. If a foreman does not give all the men a fairly equal chance of employment, the trade union committee may punish him by suspension. If an employer keep his men waiting for their money five minutes after it is due, he has to pay them for another hour (see *Report of the Sweating System Committee*, Vol. II., pp. 144, 145).* Contract foremanship is forbidden by the trade union, the foreman being paid a time-wage higher by only one shilling a day (say, 17 per cent.) than that of the subordinate workers (*ibid.*, pp. 241-244). The enforcement by the trade union of the regulations just stated has effected a vast improvement in the position of the stevedores, who, before their union existed, are stated to have been underpaid and ill-treated, but who now—I refer to the men who are members of the trade union—are a contented and fairly prosperous body.

Now, by the light of the facts just narrated, let us compare the working of the trade union plan adopted by the London stevedores with that of the co-operative system, as carried out in relation to the associated coal-trimmers at Burntisland, who (as will be remembered) having a contract with the dock company to stow all coal requiring to be dealt with, at certain agreed prices, work under a foreman elected by themselves, and who all share in the "profits of the job," the subordinate members of the association jointly with its director. Is it not fairly clear that

* See also the evidence given before the Labour Commission by Mr. J. Donovan (*Evidence*, Group B., Vol. I., pp. 123-137), by Mr. R. Cridge (*ibid.*, pp. 170-185), and by Mr. S. Sims (*ibid.*, pp. 337-340).

all those facilities for regulating the earnings of management which exist under the Burntisland co-operative system, and facilities for controlling the conduct of the manager very nearly as great as are provided by that system, are, for all practical purposes, supplied by the trade union plan in force among the London stevedores? Accordingly, when Mr. Tillett, the secretary of the Dockers' Union, was asked before the Sweating System Committee whether these stevedores worked "under the co-operative system," he with perfect accuracy replied, "they practically have the power in their hands, although it [the work] is given out to a contractor," *i.e.*, a master stevedore (*Report*, Vol. II., p. 144). At the same time, while both the trade union plan and the co-operative method aim at getting the power into the hands of the workmen, they differ in this respect, that, while under the co-operative system all the members of the group participate, in proportions agreed upon among themselves, in the profits realised, under the trade union plan, on the other hand, the master stevedore is allowed to keep for himself the whole of the profits—profits, however, the amount of which is effectively regulated by the trade union by enforcing upon the employer the strict obligation of paying to all his employees the full trade union rate of wages.

Any attempt fully to elucidate the methods by which, and the extent to which Trade Unionism attains its object in regard to regulating the earnings of employers, would demand more space than can be

conceded here. Whether under a sliding-scale (under which a rise in prices is automatically followed by a corresponding rise in wages), or without any such self-acting arrangement, the consistent aim of trade union combination, an aim which it is able in a very large number of cases to achieve without any disturbance of industrial peace, is to secure that the employees, without sharing in the *profits* of their employers, shall—as Mr. Benjamin Jones put it in his presidential address at the Ipswich Co-operative Congress—"receive in *wages* a full share of the products of the joint exertions of labour and capital."* In regard to the cotton-spinning industry, to which Mr. Jones referred, there can certainly be little question that vigorous trade union action has, without any such revolution in the method of industrial remuneration as is proposed by the advocates of Co-operation, succeeded to a remarkable extent in carrying into effect that regulation of the earnings of the employer which is the common object of both Trade Unionism and Co-operation. For in this trade, while the "wages of management" have been very greatly reduced,† the rate of interest earned by capital has sunk to a very moderate level,‡ so that

* *Report of Co-operative Congress*, 1889, p. 21.

† Compare the remarks made by Miss Potter (Mrs. Sidney Webb), in her book on *The Co-operative Movement in Great Britain*, p. 132.

‡ See the evidence given before the Labour Commission by Mr. Albert Simpson, who produced "the last Oldham list, which gives the results and values of the whole of the mills in Oldham—110 mills," showing that the shares of sixty-seven were at a discount. Speaking of the earnings of the cotton mills during the last ten years,

the employees are able to say, in the words used in his evidence before the Labour Commission by Mr. George Silk, president of the Amalgamated Society of Card and Blowing Room Operatives, "We look at the general profit that the trade is making; we know the price cotton can be bought at; we know the price that yarn is sold at every day; we know exactly the margin; we know to the hundredth part of a penny what it costs in stores; the fixed stock is public property; we know what a sensible and reasonable depreciation is upon the same; and we know that *after we have got our wages out of it and we leave the balance to the employer, he has nothing to make a great noise about.*"*

The reasons, which make it proper to exclude from a work dealing solely with the method of industrial remuneration any detailed consideration of Trade Unionism will now be obvious. Trade Unionism accepts the ordinary methods of industrial remuneration as it finds them, and tries to make the best of them. Co-operation, with more ambitious aim, proposes to supplant the wage-system, wholly or partially, by certain novel methods, the nature of which will be examined in the succeeding chapters.

Mr. Simpson said—"If they were all averaged up, fairly averaged, that even upon their own showing they would not reach 5 per cent., but if they were calculated on what I hold is a fair basis, they would not reach 2 per cent." (*Evidence before Labour Commission*, Group C., Vol. I., pp. 77-83). Compare the evidence to the same effect given by Mr. W. A. Russell (*ibid.*, pp. 133-140).

* *Evidence before Labour Commission*, Group C., Vol. I., p. 21.

CHAPTER XVII.

WHAT IS MEANT BY PROFIT-SHARING.

The modifications, which Co-operation proposes to introduce into the method of industrial organization and remuneration, may be thus briefly summarised. Co-operation contemplates that the operations of industry shall be carried on by groups voluntarily associated, and working under managers elected by the members of the respective groups, each of these groups dividing between its own members the entire profits realised.

The proposals just explained are those made by Co-operation in its perfect form. But, in addition to the perfect type, there exists a partially co-operative ideal, according to which the solution of the Labour Problem is to be sought in the adoption of a method known by the name of "Profit-sharing."* Under the method of Profit-sharing no attempt is made to secure for the workmen the control of the business;

* Sometimes also termed "Industrial Partnership."

the power of the employer is to remain paramount, but he is to give to his employees, in addition to their wages, and as the further remuneration of the labour performed by them, a share in his profits. The perfect type—Industrial Co-operation—is essentially a working-class ideal. To put the matter shortly; the main ideas underlying Industrial Co-operation are (1) that the employer is an unnecessary encumbrance; (2) that control ought to rest with the workmen; (3) that the receipt of wages is inconsistent with the dignity of labour; (4) that the exclusion of the workmen from participation in profits is a flagrant injustice; and (5) that, if the workmen can get into their own hands the profits of the business in which they are engaged, their financial position will be immensely improved. Industrial Co-operation proposes that the working-classes shall seek salvation by eliminating from commerce and manufacture the interference of the superfluous middle-classes.* Profit-sharing, on the other hand, is a device adopted by middle-class employers—men who have not the smallest intention of ceding the government of their business into the hands of their employees, and who entertain the firm conviction that the class to which they belong is anything but superfluous—mainly because these employers consider that the prosperity of the undertakings, which they

* Compare *History of Co-operation*, by G. J. Holyoake, Vol. II., p. 83. "What Co-operation proposes is that workmen should combine to manufacture and arrange to distribute profits among themselves, and among all *of their own order* whom they employ."

manage, will be promoted by allowing their employees to participate in their profits. So much as to the distinction between the ideal of Profit-sharing and the ideal of Industrial Co-operation. It is now time to examine in detail the theory and the practice of these two distinct forms of Co-operation.

Before we commence our investigation of the peculiar method of industrial remuneration known as "Profit-sharing," it will be necessary clearly to define this method, and to distinguish it from other systems, with which it is not seldom confounded. The definition of the Profit-sharing method has formed the subject of resolutions by two bodies well qualified to deal with the subject—the International Congress on Profit-sharing, held at Paris in 1889, and the International Co-operative Congress, held at Delft in 1897. The latter Congress had before it a report dealing with the definition of Profit-sharing, which had been drawn up, after careful deliberation, by a special Committee appointed by the preceding International Co-operative Congress, held at Paris in 1896—a report, which took as its basis the definition arrived at by the Paris Congress of 1889, and proceeded to illustrate and explain its application. The Delft Congress adopted this report in its entirety; and the text of this authoritative exposition of the method of Profit-sharing will now be set forth as passed by the Congress, with the addition only of certain comments, mainly by way of explanation, which will be added in notes.

With respect to the definition of Profit-sharing, this

Committee takes as its basis the definition implied in the first resolution passed (without opposition) at the International Congress on Profit-sharing held at Paris in 1889, a meeting attended by a large number of the leading exponents of the method, and the competence of which is beyond question.

"Le Congrès international est d'avis :

> 1. Que la convention librement consentie, par laquelle l'ouvrier ou l'employé reçoit une part déterminée d'avance des bénéfices, est conforme à l'équité et aux principes essentiels du droit positif" (*Compte Rendu in extenso des Séances*, p. 267, Paris, Chaix, 1890).
>
> "The International Congress is of opinion, 1. That the agreement, freely entered into, by which the employee receives a share, fixed in advance, of the profits, is in harmony with equity and the essential principles of positive law."

In order that the definition just set forth may be of practical utility as a test of what is, and what is not Profit-sharing, it is necessary to explain in what sense its terms are understood by this Committee.

With respect to the "agreement" mentioned in the definition, the Committee consider that, while an agreement binding in law is the normal form, they do not exclude cases where the agreement has only a moral obligation, provided that it is, in fact, honourably carried out.

By a "share" in profits is meant a sum paid to an employee, in addition to his wages, out of the profits, and the amount of which is dependent on the amount of these profits. If an employer undertakes, for example, to contribute to a Pension Fund £1 for every £2 contributed by his workmen, this is not a case of Profit-sharing, unless the undertaking is to pay out of profits only, because the

sum payable under the agreement does not depend upon the amount of the year's profits.*

With respect to the "profits," a share in which is, under a Profit-sharing scheme, allotted to the employees, these profits are, in the opinion of the Committee, to be understood as the actual net balance of gain realised by the financial operations of the undertaking in relation to which the scheme exists.† It is, therefore, necessary to point out that the payment of bonus on output, premiums

* It will be observed that it is sufficient if the bonus *depend* on the profits; it need not *vary* with the profits. Thus, an agreement to pay an uniform bonus at the rate of 5 per cent. on wages in each year, in which the profits shall amount to not less than 4 per cent. (on the capital), would be a case of Profit-sharing, since, if only 3 per cent. is earned on the capital, no bonus is payable.

† "*The actual net balance of gain realised by the financial operations of the undertaking in relation to which the scheme exists.*" Compare the article, "Comment définir la participation aux bénéfices?" by M. Maurice Vanlaer in *Révue d'Économie Politique*, August-September, 1897, pp. 771-786. There are some cases in which participation in profits is applied departmentally, *i.e.*, separately to separate parts of a business having several branches. Suppose, for example, a firm in the manufactured iron trade has its own collieries, iron mines, limestone quarries, and blast-furnaces, supplying the works in which it makes bar and angle iron, deck-beams, &c. The firm may fix a standard cost of production for the products of any one or more of the subsidiary undertakings, say its blast-furnaces, and may undertake that, if the pig-iron shall be produced at less than this standard cost, one-half of the difference between the actual and the standard cost shall be paid to its blast-furnacemen by way of bonus, in addition to their ordinary wages. Such a plan as this will not be an example of Profit-sharing, because the amount of the bonus is not dependent upon the actual profits realised. The firm might quite well be making heavy losses at a time when, the cost of production of their pig-iron being below the standard, they were (in accordance with their agreement) paying high bonuses to their blast-furnacemen. Suppose, again, that a firm with several distinct factories, were to

proportionate to savings effected in production, commission on sales and other systems under which the amount of the bonus depends upon the quality or amount of the output or volume of business, *irrespective of the rate of profit earned*, does not constitute Profit-sharing.*

It is to be observed that the money to be received by the employee under Profit-sharing is to be received by him strictly as an employee, *i.e.*, in consideration of the work done by him. The fact, that an employee holds

agree with the persons employed in each that, (1) if the cost of production in each case should fall below the market price of the day of the articles produced in each separate factory, then one-half of the difference between the cost of such articles and their market value should be paid to the employees of the factory by way of bonus. Would this be Profit-sharing? Or, again, (2) if the divisible profit fund were the difference between the cost of production and the actual realised price of the several products (whether above or below the market price)? It is submitted that the former of the two cases last supposed would not come within the definition set forth in the text, because the profits divided would not be an actual balance of gain realised by the financial operations of the undertaking; but the second plan might well be held to fall within the definition. By the present writer any scheme of departmental participation in profits applied to a business, in which each department is carried on practically as a separate undertaking, would be considered to be a case of Profit-sharing.

* With respect to the distinction between Progressive Wages and Profit-sharing, see *ante*, p. 99; what distinguishes all cases of bonus on output and other forms of Progressive Wages from Profit-sharing is, of course, the fact that in all cases of Progressive Wages the bonus is a premium upon efficiency of production, the amount of which is the same, whether the profits of the business are high or low; while in all cases of Profit-sharing the amount of the bonus varies directly with, or is dependent upon, the rate of profit earned by the undertaking. It may be of interest to note the existence of a peculiar form of bonus payment, which cannot well be classed as either Progressive Wages or Profit-sharing.

shares or any pecuniary interest in an undertaking, and as such holder receives, on account of such shares or interest, a part of its profits, does not constitute a case of Profit-sharing.*

Having explained what they understand by a "share in profits," the Committee direct attention to the requirement contained in the Congress resolution that the share shall be "fixed in advance." It is not necessary that the employees shall know all the details of the basis upon which the amount of their share is fixed; thus, an employer may agree to give his employees one-half of all his profits in excess of a certain Reserve Limit, that limit being communicated only to an accountant who certifies

This is the case (of which several examples are known to the writer) in which the bonus is dependent upon the total turn-over of the business—the "gross sales." This is evidently not Profit-sharing, because in any given year the firm might make no profit, and yet, if it had sold a large quantity of goods, a high bonus would be payable. Nor is it Progressive Wages in the same way as the payment of commissions on sales to a salesman or traveller; for in the case of commission on sales, this is a bonus, the amount of which depends directly upon the amount of goods sold by the person receiving the commission, and varies mainly in a direct ratio with the intensity of exertion and degree of skill displayed by this individual; while, where the bonus is a sum, divided between the whole body of the employees, which varies in amount with the amount of the total turn-over of the firm, many other elements, distinct from the zeal and ability displayed by the employees, will, of necessity, influence the amount of the turn-over, and, consequently, of the bonus.

* Profit-sharing is a method of industrial remuneration (*i.e.*, a system of paying for labour); but the dividend received in respect of shares held by an employee is received, not as the remuneration of his labour, but in right of his capital; and, as all who have dealt with this subject agree, the mere fact that shares in a concern are owned by some of its employees, does not give the business the slightest claim to be considered co-operative; see Thornton, *On Labour*, p. 360, and Holyoake, *History of Co-operation*,

what is due to the employees; this would be a case of Profit-sharing. On the other hand, if the share given to the employees is indeterminate, *i.e.*, if the employer at the end of the year determines whether he shall give one-tenth or one-fifth, or some other fraction of his profits, to his employees, at his absolute discretion and not upon any prearranged basis—this is not Profit-sharing.*

The next question is, supposing the total amount which an employer is to give to his employees as a body to be fixed upon a predetermined basis, must the share of each individual participant be similarly fixed? Or may the employer distribute this amount at his unfettered discretion among the different employees, according to his opinion of their merit or otherwise? In strictness, cases

Vol. II., p. 82. In some cases an arrangement is made that money shall be received on loan from the employees, to bear a fixed rate of interest, and, in addition, a further rate, which shall bring the total return on this capital up to the rate of dividend earned from time to time by the shares (or such further rate as shall equal one-half or some other fraction of the difference between the fixed interest and the dividend on the shares). It is sometimes denied that an arrangement of this nature is a case of Profit-sharing, because it is said that, what the employee receives, is received in right, not of his labour, but of his capital. But it is submitted that, in cases in which the arrangement in question is made *with employees only*, and not with the outside public, all that the employee receives in excess of the fixed interest may fairly be regarded as a bonus out of profits paid to him by way of remuneration (in addition to wages) for his labour, and that all such schemes can properly claim to come within the category of Profit-sharing.

* This plan of paying to employees periodical bonuses, the amount of which is not fixed on any predetermined basis, is usually termed "Indeterminate Profit-sharing," or (more accurately) "Bonus-giving." The practice of giving gratuities, varying in amount at the discretion of the employer, appears to be of too unsystematic a character to justify its elevation to the dignity of an industrial method.

of the latter type might well be held not to fulfil our definition,* but the Committee, on careful consideration, are not prepared to declare such cases inadmissible as instances of Profit-sharing, provided that in any event the whole of the employees' share be distributed among all or some of the employees, except such as shall have forfeited their share by their failure to comply with precise reasonable conditions of participation, but so that in no case shall any part go back to the employer.

It is important to inquire how far a distribution of profits must extend in order to constitute a case of Profit-sharing. If the distribution be confined to managers, foremen and leading hands, or to any of such classes of employees, this, in the opinion of the Committee, is not Profit-sharing. A profit-sharing distribution may exclude persons who are not adults, or who have not been in the service of the employers for some reasonable qualifying period, but must, in order to come within the definition of Profit-sharing, include in any case a large proportion, which the Committee consider should not be less than 75 per cent. of the total number of the adult employees who have been in the service of the employer for at least one year.†

In accordance with the definition given in the report just cited, the term "Profit-sharing" will in this book be used as applying to those cases, in which

* See this view urged by Dr. Heinrich Frommer, *Die Gewinnbetheiligung*, p. 60; this book contains a most valuable analysis of the profit-sharing method.

† In the account of the practice of Profit-Sharing given in subsequent pages no attempt will be made to draw a hard and fast line of this nature as to the irreducible *minimum* proportion of the total number of employees who must participate in order to constitute a case of Profit-sharing.

an employer agrees with his employees that they shall receive, in partial remuneration of their labour, and in addition to their ordinary wages, a share, fixed beforehand, in the profits of the undertaking to which the profit-sharing scheme relates.

CHAPTER XVIII.

PRODUCT-SHARING.

With a view to presenting in as lucid a manner as possible the special features which characterize the co-operative method of Profit-sharing, it may be well briefly to contrast this method with a system of industrial remuneration possessing certain points of resemblance—the system known as Product-sharing.

One of the cases of Product-sharing most commonly referred to is that which exists in agriculture under what is known as the "métayer" system. The landlord supplies the land and buildings, and often also some or all of the stock, seed, and implements required, receiving in return an agreed proportion of the crops and other products of the farm, the balance, of course, being the property of the tenant. But this plan of "farming on shares" does not involve the existence between the two parties to the contract of any such relations as exist between employer and employed; and the consideration of this system would be foreign

to the purposes of a book dealing with the method of industrial remuneration.

A form of Product-sharing, which certainly comes within our purview, is the system of "tribute," still in force (although apparently dying out) in the Cornish mines. The different pieces of ground varying considerably in point of metalliferous richness, difficulty or ease of working, &c., each "pitch" is let to a miner on the terms that he shall receive a specified percentage of the agreed value of the mineral actually extracted from this piece, the man who offers to work the ground for the lowest sum per pound on the agreed value of the ore raised becoming the "taker." The "taker," it should be understood, is the representative of a co-operative group (consisting "sometimes of as many as twelve men and boys, sometimes of sixteen, sometimes of eighteen, sometimes even of twenty-four or thirty-six") * who work together, and divide between them in equal shares the lump sum received for the job. This group or "pair," before the auction takes place on the "public survey day," carefully inspect the parts of the mine to be dealt with, and are fully competent—probably more competent than their employer or his agent—to judge as to the comparative richness of the ground and as to all other matters necessary to enable them to know how much the job will yield to them. Now let us contrast Product-sharing with Profit-sharing; in the former case, if the miners find a job unprofitable, they have

* "*West Barbary*," by L. L. Price, p. 52 *n.*; to this work the reader is referred for a full description of the system of tribute.

only their own bad judgment or bad luck to blame for it.* But under a Profit-sharing scheme, no matter how well the operatives may have done their work, they may quite well find that, owing to the bad management or bad luck of their employer, their bonus may be one of quite microscopic proportions, or may have vanished altogether.

Another example of the method of Product-sharing is to be found in the share system in force among a certain number of our barge sailors. Under this plan the net freight, after deducting working expenses, is shared in agreed proportions between the owner of the barge and the captain, the latter paying his mate and any other assistants whom he may find it necessary to employ.†

Perhaps the best example of the position occupied by the system of Product-sharing in regard to the

* Observe that no mistake made by the employer in failing to get the best possible price for the ore can affect the earnings of the tribute-worker; for the amount of those earnings depends upon the *agreed* value of the mineral extracted, and not upon the price at which the ore is actually sold; see "*West Barbary*," p. 90.

† As to the system in force in working barges on the Thames and Medway, see the evidence of Mr. James Tookey, the representative before the Labour Commission of the United Bargemen and Watermen's Protection Society. This witness laid before the Commission certain objections which exist to the share system, *e.g.*, the irregularity of men's earnings when their barge is only casually employed, their losses through detention of their barge, for which it is often impracticable to recover demurrage (*Evidence before Labour Commission*, Group B., Vol. II., pp. 194-196). With respect to the system prevailing in relation to the sailing barges plying on the Lower Mersey, see *ibid.*, p. 312.

method of industrial remuneration is afforded by the numerous cases which occur in the fishing industry. The systems in force among fishermen are very various; in some instances they are paid ordinary time-wages, in others progressive wages (a fixed time-wage supplemented by a premium of so much per ton of the catch); in other cases, again, their remuneration consists, not in any form of wages, but in a specified share in the catch or its market value; sometimes they are paid partly by fixed wages, partly by a share in the catch.* The plan last mentioned is closely analogous to Profit-sharing, but differs in certain important respects. Let us suppose that the employer (the boat-owner) has paid an exorbitant price for his boat, and for his nets, and has, it may be, sold his share of the catch in advance at a ridiculously low price; under such circumstances it may occur that his profits in relation to a given trip may be very low indeed. In such a case, does it follow that the bonus allotted to the men (in supplement of their wages) will also be correspondingly low? Certainly not; for the bonus of these fishermen is wholly irrespective of the rate of profit realised by their employer. But if the method adopted had been Profit-sharing, then such mismanagement on the part

* For a full account of the various forms of the share system in our sea fisheries the reader is referred to the details, based mainly upon information supplied by Mr. H. Noel Malan, Inspector of Fisheries, which are contained in the *Report on Profit-sharing*, by the present writer, published by the Labour Department [C.—7458 of 1894], pp. 6-13.

of their employer would, of course, have diminished their remuneration. Under the method of Product-sharing, on the other hand, the reward of the men's labour is—it will be seen—dependent for its amount exclusively upon the success of their own efforts.

The method of Product-sharing is, for obvious reasons, one incapable of very wide application. The circumstances of the "tribute" mining are peculiar,* and do not find a parallel in many other industries. The sale of a man's share in a catch of fish is a simple matter, transacted by a market salesman in a few minutes. But a boot operative, who should find himself asked to take home every week, in lieu of his wages, or as supplemental to his wages, a number of pairs of boots, or, it may be, a single shoe, would decidedly feel extremely embarrassed. However, the general features of this system have seemed to deserve description, on account at once of their strong resemblance to, and of the instructive contrast which they afford with, the more generally important method of Profit-sharing.

* The principal peculiarity consists in the difficulty of ascertaining beforehand the richness or poorness of a "pitch"—a difficulty which "the growth of knowledge on the part of the captains" (or mine agents) is gradually overcoming ("*West Barbary*," p. 87).

CHAPTER XIX.

THE THEORY OF PROFIT-SHARING.

HAVING now arrived at a clear conception of the method of Profit-sharing, under which the employee is to receive, in addition to his wages, and as the further reward of his labour, a stipulated proportion of the net gains of the business carried on by his employer, we will proceed to consider the nature of the participation thus proposed.

It is not intended in these pages to expound at any length the theory of Profit-sharing, which has been amply explained by Dr. Boehmert, and Mr. Sedley Taylor, and, more recently, in an admirably concise and practical work by Mr. N. P. Gilman (*Profit-sharing between Employer and Employee*).* For our

* Many of the cases mentioned by Mr. Gilman as examples of Profit-sharing will be seen not to fall within the definition of that method adopted in these pages (Rand McNally & Co., Kingman & Co., Fabrique d'appareils électriques, Rumford Chemical Works, Brière et Fils, Tramways Suisses, W. H. Smith & Sons, Mame, Masson, Proctor & Gamble, Ara Cushman & Co., Globe Tobacco Co., *Public*

purpose it will be sufficient to refer to the various forms in which this theory is capable of application.

We will commence by examining the typical case of Leclaire, the French house-painter, by whom the method of Profit-sharing is commonly stated to have been originated. At the time when he adopted Profit-sharing, Leclaire employed three hundred men, all on time-wage. Leclaire reckoned that, if each of these men could be induced to work with greater zeal and intelligence, to waste less materials, and to spoil less tools than at present, a saving would be effected equivalent to rather more than £3,000 a year. His plan consisted in providing the requisite inducement, and that without any cost whatever to himself, by offering to his employees a share in his profits, such share to be paid out of this new profit of £3,000 a year which the new method was to create.* "The increased

Ledger, *Staats Zeitung*, Norriton Woollen Mills, Tufts, Yale & Towne Manufacturing Co. (see *ante*, pp. 187, 188), Mongin et Cie, Fives Lille Co.—a case of Gain-sharing, accurate particulars as to which, stated by M. Charles Robert, president of the French Profit-sharing Society, will be found in *Rapports du Jury International*, *Économie Sociale*, Section II., pp. 136, 137. All Mr. Gilman's cases of Indeterminate Profit-sharing are also outside our definition. It may be noted that Veuve Boucicaut is wrongly classed as Indeterminate; so are Tangyes, and Young & Co. (both of which firms have since abandoned Profit-sharing); while the Wardwell Needle Co. is improperly placed among the "Determinates."

* It is related that, when John Marshall, of Leeds, was showing Robert Owen over his mills, he remarked that "If my people were to be careful and avoid waste, they might save me £4,000 a year." Owen replied, "Well, why don't you give them £2,000 to do it? and then you yourself would be the richer by £2,000 a year."

activity of the workman, his greater care of the tools and materials entrusted to him, and the consequent possibility of saving a considerable part of the cost of superintendence, enable profits to be obtained under a participating system which would not accrue under the established routine. If these extra profits were to be wholly divided among those whose labour produced them, the employer would still be as well off as he is under the existing system. But, assuming that he distributes among his workmen only a portion of this fresh fund, and retains the rest himself, both he and they will, at the end of the year, find their account in the new principle introduced into their business relations" (Sedley Taylor, *Profit-sharing*, p. 23).

Such is the general theory of what may be called "stimulus" participation, *i.e.*, Profit-sharing applied in cases in which the object of its adoption is to stimulate the zeal and increase the efficiency of the employees. In some cases, however, Profit-sharing is introduced with a view to gaining for the employer advantages other than these. Thus, if it is desired to paralyse, so far as possible, the power of a trade union, the promise of a share in profits, especially a promise conditional upon the participant's abstaining from joining a trade union, or, at any rate, upon his taking no part in strikes, may be made for the purpose of detaching the employees from allegiance to their trade union or otherwise weakening the influence of such combinations. This type might be termed "anti-union" participation.

It frequently occurs that the profits of a firm depend largely upon the preservation of trade secrets, or would be gravely imperilled by the foundation of opposition establishments, officered by its ex-servants. In such cases, and, generally, in all cases, in which it is wished to prevent the employees from leaving the service of the firm, Profit-sharing has been found capable of application with advantage to the employers, and that quite apart from any possibility of inducing the display by the employees of any extraordinary degree of efficiency. The form of this method most suitable, under circumstances of this nature, is that, in which the share in profits allotted to the employees is placed to the credit of a Provident Fund, providing pensions, &c., for those employees only who have spent a long continuous period in the service of the firm—an arrangement known by the name of "deferred" participation.

It remains to mention two types, to which the name of Profit-sharing is commonly given, although each of them embraces characteristics foreign to the accurate conception of the Profit-sharing method. The first of these types is that, in which the employee is asked to accept lower wages than he would otherwise have been able to obtain, and induced to do so by the expectation that his share in profits will recoup the deficiency in his earnings. It must be admitted that (quite apart from any bargain of this nature) other forms of Profit-sharing, such as "anti-union," and "deferred" participation, make it not unlikely that the employee will find it difficult to obtain an advance

in wages, which he might have insisted upon, if he had been unfettered by participation in profits; so that, in effect, his share in profits may very possibly turn out, in the end, to be, *pro tanto*, in lieu of, and not wholly in addition to, normal or ordinary wages. Still, it would be incorrect to assert that the theory of Profit-sharing contemplates that the share in profits received by an employee shall be, to any extent whatever, in lieu of his ordinary wages. Those employers, therefore, who may adopt the practice of sharing profits with their employees on the condition that these employees shall, *ab initio*, consent to receive lower wages than they would otherwise have obtained, cannot be considered to practise what is properly known as Profit-sharing. This type, being, in effect, Profit-sharing *minus* the payment of full wages, might be called "*minus*" or "negative" participation.

The second of the two types above referred to is Profit-sharing *plus* the payment of gratuities. The cases covered by this description are those, in which the share of profits allotted to the employees is allotted upon so generous a scale that no probable, or even possible, increase in the efficiency of their work can be expected to produce a new fund of profit sufficient to cover the amount divisible among the participants, and in which no conceivable advantage, capable of being measured in terms of money, can be expected to accrue to the employer sufficient to compensate him for the sacrifice incurred. It is clear that we have here something entirely extraneous

to the method of Profit-sharing; for under that method, as Mr. Sedley Taylor has told us, the employer, who practises Profit-sharing, is to be, at the least, "as well off as he is under the existing system." To the extent, to which the adoption of a profit-sharing scheme causes a net disadvantage to the employer, that scheme is so far false to the central idea of Profit-sharing, and is an example of Profit-sharing *plus* philanthrophy. This may be called "surrender" participation.

CHAPTER XX.

PROFIT-SHARING IN PRACTICE.

With regard to the manner, in which the method of Profit-sharing has been applied in the various instances in which some system of this nature has been adopted, it would not be possible within the compass of these pages to present any complete account. The reader, who is anxious to investigate these details, is referred, so far as Continental and American experience is concerned, to the work of Mr. Gilman, already referred to, and to the publications of the French Profit-sharing Society ("Société pour l'étude pratique de la participation du personnel dans les bénéfices," 20, Rue Bergère, Paris), in particular to *Les Applications de la Participation aux Bénéfices*, and the quarterly *Bulletin de la Participation aux Bénéfices*, and, so far as regards the cases which are known to have occurred in the British Empire, to the *Report on Profit-sharing*, by the present writer, published by the Labour Department of the Board of Trade in 1894 (*ante*, p. 252 *n*), and to the articles in continuation of that

Report which have appeared in the *Labour Gazette*, July, 1895, July and September, 1896, and July, 1897.*

The epitome of available information with respect to British Profit-sharing contained in the *Fourth Annual Report of the Labour Department* (1897), which furnishes the most recent statistics published on this subject, gives the details set forth in the tabular statement printed in the two following pages; while in Appendix A., *post*, pp. 366-379, there will be found lists, compiled from the particulars published by the Labour Department, giving the names of all the British firms, which are known to have adopted profit-sharing schemes, the particulars as to cases, in which Profit-sharing is no longer in operation, being contained in Part I., and those as to cases, in which Profit-sharing is now in force, being stated in Part II. of that Appendix.

* A careful analysis of the facts and figures in relation to Profit-sharing in various countries is contained in an article, by Dr. Rudolf Einhauser, in *Zeitschrift für die gesamte Staatswissenschaft* (Tübingen), 54th year, First and Second Parts (1898), pp. 120-272.

NUMBER OF BRITISH FIRMS WHICH HAVE ADOPTED PROFIT-SHARING SCHEMES.*

Year. (1.)	Profit-Sharing Schemes. Total Number started in each year. (2.)	Number that have since ceased to exist. (3.)	Number as to which particulars could not be obtained. (4.)	Number known to be still (June 30th, 1897) in operation. (5.)
1829	1	1	—	—
1865	5	4	—	1
1866	6	5	—	1
1867	4	3	—	1
1868	1	1	—	—
1870	1	1	—	—
1871	2	2	—	—
1872	4	4	—	—
1873	2	1	—	1
1874	1	1	—	—
1876	3	1	1	1
1878	2	—	—	2
1880	2	1	—	1
1881	2	—	—	2
1882	2	1	—	1
1883	3	2	—	1
1884	3	—	—	3
1885	3	2	—	1
1886	6	2	—	4
1887	7	4	—	3
1888	6	—	—	6
1889	19	4	—	15
1890	32	14	2	16
1891	16	6	—	10
1892	15	8	—	7
1893	5	1	—	4
1894	5	—	—	5
1895	6	4	—	2
1896	4	—	—	4
1897 (6 months)	2	—	—	2
Total	170	73	3	94†

* Of the firms included in the 1896 Abstract of Labour Statistics, 19 sent no returns in 1897. Out of these 19 firms, 1 is known to have been dissolved in 1896, 3 (which sent no returns either in 1896 or 1895) are referred to in column 4 (1 of these 3 firms being in a British colony); while 15 (of which 11, including 1 colonial firm, sent returns in 1896, and 4 in 1895) are, for the present, assumed to still practise Profit-sharing.

† Including 5 (of which 1 was started in 1885, 1 in 1888, 2 in 1891, and 1 in 1896) in British Colonies.

TRADES IN WHICH PROFIT-SHARING SCHEMES HAVE BEEN ADOPTED BY BRITISH FIRMS.

Nature of Business.	Number of Businesses in which Profit-sharing, having been instituted, no longer exists.	Number of Businesses as to which particulars could not be obtained.	Number of Businesses in which Profit-sharing was known to exist at 30th June, 1897.	Number of Persons employed in Businesses in which Profit-sharing was known to exist at 30th June 1897.*
Building trades	4	—	2	161
Mining and quarrying	3	—	1	340
Metal, engineering, and ship-building trades:				
Metal	6	—	2	380
Engineering and ship-building	9	—	6†	23,579
Textile trades	4	—	6	2,439
Clothing trades	6	—	3	1,071
Transport	1	—	—	—
Agriculture	7	—	7	420
Printing, paper, and allied trades:				
Printing	9	2	12	2,588
Other	2	—	2	424
Woodworking and furnishing trades	1	—	3	473
Chemical, glass, pottery, &c.	3	—	6	1,556
Food and tobacco	4	—	9	5,082
Gas works and tar distilling	—	—	3	4,531
Fibre and cane working	—	—	1‡	95
Other businesses	14	1§	31§	3,936
Total	73	3	94	47,075

* The numbers employed in some of the businesses vary from seasonal and other causes. The figures given above are a mean between the *maximum* and *minimum* numbers employed. In regard to 21 firms, as to which later particulars could not be obtained, the numbers given are, as to 2, those appearing in the Report published in 1894, as to 8, those supplied by the firms in 1895, and as to 11 (including 1 colonial firm, an engineering business, employing 889 persons), those supplied by the firms in 1896.

† Including 1 colonial firm, employing 889 persons. ‡ Colonial.

§ Including 3 colonial firms, employing 283 persons.

As the figures stated in the two Tables just set forth show, the Profit-sharing system has, so far as information is available on these points,* been applied in the British Empire in 170 cases, and in a great variety of undertakings in many different trades. The total number of British firms, by which Profit-sharing has been adopted, but has subsequently, for one reason or another,† been abandoned,‡ is 73; the period during which, in these cases, so far as the particulars are known, Profit-sharing was in operation before its discontinuance, was 23 years in one case; 21 years in one case; at least 17 years in one case; 15 years in one case; 12 years in two cases; 11 years in one case; 10 years in two cases; 9 years in three cases; 8 years in four cases; 7 years in one case; 6 years in six cases; 5 years in two cases; 4 years in eight cases; 3 years in ten cases; 2 years in twelve cases; 1 year or less in fourteen cases.§ The number of the British firms at present practising Profit-sharing

* It cannot be doubted that there are a not inconsiderable number of cases, in which Profit-sharing has been adopted by British firms, but as to which it has not, so far, been found possible to obtain, or to publish particulars.

† As to the causes of the cessation of Profit-sharing in different cases see *post*, p. 280.

‡ In addition to the cases in which Profit-sharing was introduced and subsequently abandoned, details in regard to four cases, in which an attempt to introduce a profit-sharing scheme was ineffectual, are given in the Labour Department *Report on Profit-sharing*, 1894, pp. 43, 83, 98, 123, 124.

§ The details as to the duration of Profit-sharing in the cases, in which this method is no longer in operation, are compiled from the *Report on Profit-sharing* of 1894 and subsequent information given in the *Labour Gazette*, July, 1895, July, 1896, and July, 1897.

(including, however, 3 as to which no recent details have been obtained, and which may possibly have ceased to practise Profit-sharing) is 97, of which, as the first of the two foregoing Tables shows, 30 adopted this system before 1889, 43 in the years 1889-91, and the remaining 24 since the latter year.

While our experience of Profit-sharing goes back for a good many years, and has extended to a fairly large number of cases, the different types of Profit-sharing, which have been applied in different instances, have included most of the main forms in which it is possible to introduce the method. So various, indeed, have been the schemes adopted in different cases, that all that can be done in these pages, with a view to giving the reader some idea of their nature, will be to state, in bare outline, their general features.*

First, as to the character of the contract between employers and employed; in a certain number of cases the right to share in profits accorded to the employees is a strict legal right; in many others the bonus is declared to be given "gratuitously," or the profit-sharing scheme is expressly declared to confer no legal rights.†

With respect to the profits, a share in which is allotted to the employees, these are nearly always the profits of the concern as a whole; but in certain instances different parts of one business are treated as separate undertakings, the persons employed in each

* Examples of profit-sharing schemes of different types are set forth in Appendix B., *post*, pp. 380-404.

† See *post*, pp. 304, 305.

separate department sharing in the profits earned in that department.* With regard to the methods adopted in determining the proportion of profits allotted to the employees as bonus, a great number of different plans are in force. In calculating the profits, out of which bonus is to come, such outgoings as rent, rates, taxes, and all working expenses, including wages and salaries, are first deducted from the gross revenue; and in most cases a *minimum* rate of interest on capital† is also set apart in priority to all claims to bonus, while a fund has also usually to be provided to cover depreciation of plant, &c. ‡; and in some cases provision is made for maintaining reserve funds. In a few cases the employees take a specified share in the net revenue concurrently with the ordinary capital, and without any prior deduction in respect of interest.

With respect to the *minimum* rate of interest payable before any sum is available for bonus, this is in some instances cumulative; that is to say, if not paid in any one year, it must be made good out of the earnings of subsequent years; in other cases it is provided that, if the capital become

* See *ante*, p. 243 *n*.

† The *minimum* rate of interest varies very greatly in different cases, being, in some of the cases described in the Labour Department *Report* of 1894 as low as 4 or 4½ per cent., in many cases 5 per cent., in others 6, up to 10, and in one case 15 per cent.

‡ The percentage on the value of plant, &c., set aside to cover depreciation appears to vary considerably; in one case mentioned in the *Report* above referred to it is 2½ for plant, 5 for machinery and fixtures; in another, 5; in two others, 6; and in one, 10 per cent.

impaired, the loss must be recouped before any division of subsequent profits takes place. In many instances, as for example in the case of joint-stock companies, all charges for management must have been paid before any distribution of bonus can take place; while a private employer will either allow himself a claim for a certain salary by way of remuneration in respect of the work done by him in relation to the management of the business,* such claim ranking in priority to bonus, or will take his remuneration wholly in the form of profit. A plan often adopted is to set aside out of the revenue of the business a fixed *minimum* amount, frequently spoken of as the "reserved limit," which is fixed at a sum sufficient to include all charges for interest, depreciation, salaries of partners, &c., taking priority to bonus, and provides for the employer a *minimum* rate of profit which he reserves to himself in any event, the participation of the employees commencing only after the profits of the year have exceeded the reserved limit. At what figure the reserved limit shall be fixed, depends, naturally, upon the circumstances of each case. In some cases the reserved limit has been fixed at the amount of the profits earned in the last year, or at that of the average profit of a number of successive years immediately preceding the adoption of Profit-sharing; but the employer is in some cases stated to have fixed his reserved limit so low as to allow the participation

* This remuneration for management is in some cases included in the *minimum* interest on capital.

of the employees to begin at a point below the average profits of preceding years.*

When we come to ask, what is the share in the total fund available for distribution as bonus which is allotted to the employees, we find that in many cases the share of the employees is a specified fraction of the surplus profits (in excess of the *minimum* reserved in priority to bonus), a fraction varying widely in different cases; while in some instances the employer offers to give up to his employees so much of his surplus profits as shall suffice to pay them a bonus at the same rate per cent. on their wages as the dividend earned by the capital, or a bonus at a fixed rate, uniform from year to year;† or the surplus profits are divided rateably on the capital and the total amount of the year's wages. But, indeed, the variety of methods of division obtaining is so great, that any attempt to describe in detail the different plans adopted would be altogether impracticable in this place; and the reader anxious for fuller information on this point must be referred to the Labour Department *Report on Profit-sharing* of 1894 already mentioned.

In some instances the accounts of a profit-sharing firm are submitted to a public accountant, to whom the basis adopted in regard to the division of the

* As to the proportion of cases in which (whether under the "reserved limit" plan or other forms of Profit-sharing) participation is allowed to begin at a point below the average profits of preceding years, see some remarks by Mr. T. W. Bushill, *Appendix to Evidence before the Labour Commission sitting as a whole*, p. 210.

† See *ante*, pp. 258, 259.

profits is communicated, and who certifies what is due to the employees in respect of their share.

The next point for consideration is the conditions attached to participation in profits. In some cases all the employees without distinction are allowed to share in the bonus fund; but in many instances participation is confined to persons who possess certain qualifications, the most frequent of which is a certain *minimum* length of service with the firm, which is in many cases six months' or twelve months' continuous employment, though in a few cases a shorter, and in some instances a much longer period of service, extending to eighteen months, two years, three years, and in exceptional cases to even a greater number of years, is required as a qualification. In a few cases persons below a certain age are excluded. With one company the persons who are to participate in profits are selected from the general body by the directors, acting on the recommendation of heads of departments and of the managers. In the case of certain other firms it has been left to committees consisting wholly or mainly of employees to decide what shall be the qualifications for participation in profits.* A few firms have made it a condition of participation in profits that the employees shall undertake to serve them for a certain term (six months, or twelve months). One company makes it a condition that the participant shall not be a member of his trade union; while one employer will admit to

* In one case, in which Profit-sharing was afterwards abandoned, this method of selection was found to cause much friction.

share in his profits none but members of the trade union. In a certain number of firms the employee, in order to participate in profits, must be a member of a sick or other provident club or institution. Some profit-sharing firms exclude from participation particular classes of employees, such as pensioners, persons paid wholly or partly by commission, and piece-workers.*

In a few cases it is made a condition of participation in profits, that the employees shall, by taking shares in the business, or by depositing money with the firm, contribute to the capital of the undertaking. As an example of this latter type of Profit-sharing may be mentioned the scheme in force with Sir W. G. Armstrong, Whitworth & Co., Limited, ordnance manufacturers, and iron and steel shipbuilders, a firm employing about twenty-one thousand persons. Under this scheme deposits of not less than 1*s*, and not more than £1 of the depositor's weekly wages are received from persons in the employ of the company each week (officials paid quarterly being allowed to deposit up to £2 per week), the *maximum* amount which may be deposited being £200 (£400 for those paid quarterly). The deposits carry a fixed interest of 4 per cent., and, in addition, are entitled to a bonus declared each year equal to half the difference between this fixed rate and the dividend payable on

* In connection with the question of the number of persons admitted to participation, it should be observed that, if a small number of workmen in a large body are alone allowed to share in profits, this arrangement creates a tendency on the part of these favoured individuals to exercise a rigid supervision over the work of the non-participating employees, which these workpeople are likely to resent, and which may not improbably give rise to considerable friction.

the shares of the company.* The profit-sharing deposits are sometimes, as in the case just described, made on loan without security, but in other cases rank as debentures.†

In regard to the proportions, in which the fund available for distribution as bonus shall be divided among the employees entitled to participation, a considerable variety of methods exists. A large number of firms divide the bonus fund among the participants in proportion to the amount which each has earned in wages during the financial year. In some cases the bonus fund is divided according to the ratio between, not the amounts actually earned by the participants, but their normal or rated pay, additions to such pay in respect of overtime and piece-work being excluded from calculation. In some instances the share, which each participant shall take, is, wholly or in part, determined by the length of time during which he has been in the service of the firm, or by his position and the nature of the duties which he performs, provision for giving an extra proportion to managers and foremen being not uncommonly made. In some instances the share, which shall be taken by each participant, depends upon the ability which he has exhibited, the interest which he has displayed in his work, &c., as decided by the judgment of the employer.

* See *Labour Gazette*, July, 1897, p. 196.

† For form of Agreement in relation to profit-sharing deposits see Appendix B., *post*, pp. 396-402; for form of Agreement in relation to Workmen's Profit-sharing Debentures, see *ibid.*, *post*, pp. 403, 404.

In the large majority of cases the sums appropriated for the benefit of the employees are paid to them in cash; several firms, however, allow the recipients of bonus to leave the money with them on loan, while others arrange to pay the bonus, not directly to the participant, but to his credit in a savings bank account. In several instances a proportion, varying in different cases (in a few cases the whole) of the bonus is devoted to making provision for the necessities arising from sickness, old age, and death, in some cases by being credited to a Provident Fund for the benefit of the employees generally, more often by arranging that the participant's bonus shall be credited to him at once, but paid out (together with accumulated interest) only when he shall have attained a specified age, or have completed a specified term of continuous service with the firm, or under certain special circumstances, provision being made in some cases for the payment of sums on the death of the participant.*

In some cases, in which sums on account of the share in profits allotted to the employees are made payable at a future date, the employee forfeits his rights if he previously quit the employment of the firm. But in many instances special provision is made enabling the employee to receive all sums in respect of the accumulations of bonus to which he was entitled when he left the service of the firm, getting his money at once, or on giving a reasonable

* In one case the firm gives security for all monies in its hands on account of the accumulations of bonus.

notice of withdrawal, or at the same time as if he had remained in the service of the firm.*

The cases, in which a part or the whole of the employees' bonus is devoted to taking up shares in the capital of the undertaking—shares, the ownership of which carries with it, in nearly all cases, the ordinary right to vote at the general meetings of the shareholders, thus conferring on the employees full rights of partnership—although not numerous, possess a special degree of interest. One of the most important examples of Profit-sharing *plus* Shareholding is the scheme in force with the South Metropolitan Gas Company, which employs some three thousand to four thousand men (according to the time of year), and which encourages its employees to become shareholders by increasing by 50 per cent. the bonus of a man who is willing to invest one-half of his bonus in stock of the company. At the half-yearly general meeting of the company in February, 1898, it was stated that "their employees were now shareholders in their company to the extent of £69,000,† and, in addition,

* It occasionally happens that employees, whose bonus is locked up in a Provident Fund, so that their only means of obtaining an early payment of the sums standing to their credit is to leave the service of the firm, discharge themselves, or get themselves discharged, with the express object of getting this money. The Edinburgh Co-operative Printing Company (a working-class co-operative undertaking), in order to meet this tendency on the part of their employees, have passed a rule providing that "should any employee resign his or her situation, or so misconduct himself or herself as to render his or her dismissal expedient, with the intent to procure payment of the sum standing in his or her account, the directors may, if they think fit, postpone payment thereof for any period not exceeding two years."

† Of the nominal value of about £48,000.

the capital of the superannuation fund, which was established many years ago for the workmen, was also invested in the company's stock, making together a total investment in their stock of £103,000. Beyond this, their men had £37,000 on deposit at interest with the company."* This company has obtained from Parliament authority to adopt a scheme, under which, at any time after the total investments of its employees in its stock, dating from the distribution of the first profit-sharing bonus in July, 1890, shall exceed the nominal amount of £40,000, the directors may prepare a scheme for enabling employees holding stock to elect one or more of their number, but not exceeding three, to be a director or directors. The scheme is to fix the qualification of an employees' director, but such director must have been at least seven years in the constant employ of the company, and must have held for not less than twelve months not less than £100 stock.

Another case of great interest in regard to the form of Profit-sharing now under consideration is that of Wm. Thomson & Sons, woollen and worsted manufacturers, of Huddersfield. Mr. George Thomson, to whom this business belonged, converted it in 1886 into a society, which was registered under the Industrial and Provident Societies Act. Mr. Thomson retains a complete control over the business, can only be removed from his position as manager "by the vote of five-sixths of all the members of the association, and five-sixths of all the votes capable of being given at a

* *Times*, February 17th, 1898.

special general meeting," and may appoint his successor. A large part of the capital is loan capital advanced by Mr. Thomson, while the share capital is to a great extent held by working-men, including, in addition to the employees (all of whom, about 130 in number, are shareholders), a large number of workmen's co-operative societies and the trade union organizations concerned. The committee, whose functions are mainly consultative, consists of Mr. Thomson, three of the employees of the society (a dyer, a designer, and a weaver), two representatives of co-operative societies (one a blanket raiser, representing the society which is the largest co-operative purchaser, the other a weaver, who is a member of a society holding two thousand shares in the concern), and two representatives of trade unionism (a working weaver and the secretary of the Weavers' Association). The surplus profits, remaining after paying a fixed interest of 5 per cent. on the share capital (with the proviso that, if this interest be not paid in full, the deficit is to be a first charge on the subsequent profits, but without compound interest), and providing for reserve fund and for an assurance and pension fund for the benefit of the employees, go one-half to the customers of the society and the other half to all persons employed by the society for not less than six months, as a bonus in proportion to wages earned, this bonus being applied in or towards purchase of shares in the society. It may be mentioned that the services rendered by Mr. Thomson, as head of the business, are so highly appreciated, that his original salary of £500 a year

has been increased by the shareholders to a very considerable extent, while his repeated offers to surrender the autocratic authority conceded to him by the constitution of the society have always been declined.*

It may be mentioned that, while in the instances just cited, the profit-sharing scheme provides for the employees having, as shareholders, a voice in the management of the business, in other cases, in which no such arrangement exists, a special consultative committee, composed of representatives of both employers and employed, is formed, which assists the employers with its advice in carrying out the profit-sharing scheme.

The general outlines of the various schemes, under which the profit-sharing method has been applied having now been explained, it remains to inquire how far these attempts to improve the ordinary wage-system have met with success, whether from the point of view of the employers or from that of the employees. To one important question—the extent of the addition, which the bonus paid under profit-sharing schemes has made to the wages of the participating employees—the best answer will be given by the figures, compiled from statistics published by the Labour Department, which will now be stated.

Dealing, in the first place, with the firms which furnished information on this point for the *Report on Profit-sharing* of 1894, we find that the ratio, which

* In this factory an eight hours day has for some time been in force, and time-wages have been substituted for piece-work.

the bonus of the employees bore to their wages on the average, taking one year with another, from the time when these employers began to practise Profit-sharing to the end of 1893, was, so far as could be ascertained, as follows. Out of the eighty-three cases to which this information relates (some few firms counting as more than one case because of their having separate profit-sharing systems in force in different branches, *e.g.*, on different farms), there were eleven cases in which no bonus at all had been paid; five in which the bonus averaged under 1 per cent. on wages; twenty-two in which the average bonus was 1 and under 3 per cent.; thirteen cases of 3 and under 5 per cent.; twelve cases of 5 and under 7 per cent.; eight cases of 7 and under 9 per cent.; five cases of 9 and under 11 per cent.; four cases of 11 and under 13 per cent.; two cases of 13 and under 15 per cent.; and one case of 15 and under 16 per cent. If we take all these eighty-three cases together, we have a mean ratio of bonus to wages of 4·4 per cent; while, if we regard only the seventy-two cases in which a bonus was paid, we find that the bonus was in these cases at the mean rate of 5·1 per cent. on wages.*

With regard to the bonus paid in each of the years 1894-1896 inclusive, the following information is available.†

* For more detailed information see *Report on Profit-sharing*, 1894, pp. 152-154.

† See *Third Annual Report of the Labour Department of the Board of Trade*, p. 142, and *Fourth Annual Report*, p. 144.

Ratio of Bonus to Wages in 1894-96.

	Ratio of Bonus to Wages. (1)	Number of cases * in which the Bonus given in Col. 1 was paid. (2)	Number of Employees of Firms referred to in Col. 2. † (3)	Number of Participants in Bonus. (4)
1894	*Nil*	25	3,053	—
	Under 1 per cent.	3	1,814	1,613
	1 and under 3 per cent.	12	1,443	1,192
	3 ,, 5 ,,	9	4,444	2,148
	5 ,, 7 ,,	17	5,154	3,960
	7 ,, 9 ,,	3	100	85
	9 ,, 11 ,,	11	1,966	889
	15 ,, 16 ,,	2	1,879	1,696
	17 per cent.	1	83	10
	Total	83	19,936	11,593
1895	*Nil*	18	3,092	—
	Under 1 per cent.	2	1,322	1,205
	1 and under 3 per cent.	17	4,975	3,243
	3 ,, 5 ,,	6	2,430	1,548
	5 ,, 7 ,,	13	6,467	3,787
	7 ,, 9 ,,	5	273	202
	9 ,, 11 ,,	4	757	651
	11 ,, 13 ,,	2	37	31
	13 ,, 15 ,,	2	195	199
	15 ,, 16 ,,	1	17	16
	21 ,, 22 ,,	1	1,792	1,792
	36 ,, 37 ,,	1	85	15
	Total	72	21,442	12,689
1896	*Nil*	23	3,654	—
	Under 1 per cent.	2	1,238	1,233
	1 and under 3 per cent.	8	1,714	1,349
	3 ,, 5 ,,	3	238	218
	5 ,, 7 ,,	14	4,435	2,633
	7 ,, 9 ,,	6	4,559	2,704
	9 ,, 11 ,,	9	1,167	965
	11 ,, 13 ,,	4	460	434
	15 ,, 16 ,,	1	22	22
	27 ,, 28 ,,	1	86	23
	28 ,, 29 ,,	1	2,466	2,461
	Total	72	20,039	12,042

* † *See notes opposite.*

MEAN AND AVERAGE BONUS IN 1894-96.

	1894.	1895.	1896.
	per cent.	per cent.	per cent.
Mean Bonus *in all cases*.....	4·0	4·7	4·9
Average Bonus *in the cases in which bonus was paid*, taking into account the number of participants in each case...	6·1	6·7	10·3

In relation to the figures which have just been set forth in regard to the ratio, which the bonus paid to the employees of profit-sharing firms has borne to the wages of these workpeople, the question naturally arises, whether in all cases the bonus paid under profit-sharing schemes represents a clear addition to wages, or whether the employees do not in some cases consent to receive lower wages than they could otherwise obtain. I have known one instance, in which a firm explained an exceptionally high bonus by the fact that their employees had not received an advance in wages which the firm would otherwise have had to grant; but, on the whole, I believe that, so far as this country is concerned, cases, in which the employees of profit-sharing firms receive lower wages than they would have obtained if no profit-sharing scheme were in force, are not very common.

With regard to the degree of success attained by the profit-sharing method, the facts in relation to

* In a few cases, in which the bonus is calculated separately for distinct branches of a business, the ratios are stated separately for each branch.

† The numbers employed by some of the firms vary, from seasonal and other causes. The figures given in col. 3 of the Table are a mean between the *maximum* and the *minimum* numbers employed.

those firms, by which the system has been tried, but subsequently given up, are of no little interest; and the Table which follows, summarising the various reasons which have led to the cessation of profit-sharing schemes in different cases will be useful.*

CAUSES OF CESSATION OF PROFIT-SHARING.

Causes of Cessation.	Number of Cases.
Death of employer	2
Job finished	2
Enterprise abandoned	2
Liquidation or dissolution	12
Changes in, or transfer of business	3
Losses or want of success	13
Diminution of profits	2
Apathy of employees	4
Dissatisfaction of employees and grant of increased wages	1
Disputes with employees	3
Dissatisfaction of employers with results	18
Grant of shorter hours	1
Substitution of fixed rate of interest	1
Special circumstances	4
Cause not known	5
Total	73

It will be seen that in nearly one-half of the cases, in which a firm has introduced a profit-sharing scheme and subsequently given up the system (thirty-six out of seventy-three), the abandonment of Profit-sharing has been due to either the death of the employer, the close of the business to which the scheme related, whether by the liquidation of the concern or otherwise,

* This Table is reprinted from the *Fourth Annual Report of the Labour Department of the Board of Trade*, p. 144.

to a change in the business, or to losses, want of success, or diminution of profits;* while in twenty-six cases the employers abandoned the method either because they found the employees apathetic or dissatisfied, or because they had disputes with their employees, or were not satisfied with the results obtained by the introduction of Profit-sharing.

It will be clear that Profit-sharing has, in a large proportion of the cases in which this method has been adopted, failed to secure the good results which its advocates claim that its introduction is likely to secure. The truth of the matter seems to be that, while the effect of the introduction of a profit-sharing scheme has in many instances, especially for some little time after the adoption of the novel method and before familiarity with the receipt of bonus has bred contempt or apathy, been to induce the employees, or at any rate, the more willing and intelligent members of the staff, to do their work with greater zeal and care than before, yet the fact that a firm shares its profits with its employees is not able in all cases to secure the exhibition of more than normal assiduity and carefulness.†

* Of the cases in which Profit-sharing was brought to an end owing to the want of success, losses incurred by, or winding-up of the undertaking, twenty-one at least may be classed as businesses initiated and carried on by social reformers — businesses which may be considered to stand on a different footing from ordinary commercial undertakings.

† Full details as to the effects produced by the adoption of Profit-sharing, in regard to both abandoned and existing schemes, will be found in the Labour Department *Report on Profit-sharing*.

With regard to the question, in what measure the adoption of the profit-sharing system has tended to the maintenance of industrial peace, it is not easy to give a precise answer. In the well-known case of the Briggs Collieries, in which a scheme on profit-sharing lines was introduced in 1865, the business being, at the same time, turned into a limited company, in which a large number of the workmen held shares, and on whose Board of Management the employees were represented by one out of five directors, it had been hoped by Messrs. Briggs that Profit-sharing would be accepted by their workmen as a substitute for trade union organization, they, on their part, abstaining from joining any combination of employers for the regulation of wages. This hope, however, was not fulfilled; the men stuck to their union, and in 1874, on the announcement made by Messrs. Briggs, in common with the other employers of the district, that they intended to reduce their men's wages, their employees resisted the reduction by striking. In consequence, the shareholders put an end to the profit-sharing scheme early in 1875.

Messrs. Fox, Head & Co., iron manufacturers, of Middlesbrough, introduced a scheme of Profit-sharing in 1866, making it a condition of participation that the men should not belong to any trade union, while the employers agreed not to belong to any association of employers. When the system was first introduced, the firm found that it "awakened among the better class of workmen a feeling of *esprit de corps*, which enabled their employers to

bid defiance to the threats and attacks of the trade unions;"* but after the scheme had been for some years in force, their puddlers (about one-third of the total number of workmen) gave up their bonus and joined the union. This scheme came to an end in 1874.

Very similar was the experience of another Middlesbrough firm, the North of England Industrial Coal and Iron Company, Limited, which in 1870 adopted a system similar to that in force in the Briggs Collieries. This company, as they wrote to me in 1889, "had to give it [Profit-sharing] up after a few years' trial . . . as we found the workmen were quite willing to share profits, but, when there was a strike in the district, our employees would not remain at work, but threw in their lot with the trade unionists when the latter called upon them to strike work."

On the other hand, we have in the case of the South Metropolitan Gas Company, already referred to, an instance, in which Profit-sharing, having been introduced for the purpose of avoiding a strike which was thought to be impending, and although its introduction was resisted by a severe labour conflict, has succeeded in securing during the whole period—over eight years—which has elapsed since its adoption, the complete preservation of industrial peace. It is, indeed, scarcely too much to say that the arrangements made in this case have made the occurrence of any attempt on the part of the employees of this

* Boehmert, *Profit-sharing*, French translation, p. 354.

company to obtain by organized resistance any alteration in existing conditions of labour an all but impossible contingency. The agreements, which the workmen are required to sign as a condition of participation in profits, while pledging them not to be members of the trade union, bind them to serve the company for a long term (twelve months in the case of all but the men employed only in winter, who sign for from three months to six). Care has been taken to make the agreements signed by the workmen expire at different dates for different men; and since the breach of these agreements would, it must be remembered, be liable to be punished by legal pains and penalties of a vigorous character,* any such simultaneous cessation of work by the whole body of employees as is involved in a strike would entail almost insuperable difficulties. At the same time, the important development of the profit-sharing scheme, which has resulted in the whole of the permanent staff becoming partners in the concern, has, as it was intended that it should (see *post*, pp. 358, 359) placed these men in such a position that any suggestion of their taking part in a strike against the company would necessarily cause them no little embarrassment.

While it cannot with truth be asserted that the adoption of the profit-sharing method can in all cases

* Persons employed in gasworks, such as those of this company, who break a contract of service can, under certain circumstances, be punished by fine or imprisonment under the Conspiracy and Protection of Property Act, 1875.

be relied upon to counteract the influence of trade unions or to render impossible the occurrence of labour disputes, the available evidence points, on the whole, to the conclusion that Profit-sharing, as a rule, is accompanied by the existence, whether as a direct consequence of the adoption of this method or not, of friendly feelings between employers and employed; and in some cases the employers, who have introduced profit-sharing schemes, state that they get "a better choice of hands," and that their employees manifest less disposition to leave the service of the firm than of old.*

* In the account here given of the results obtained by the introduction of Profit-sharing the experience of British firms only has been referred to. With respect to the "deferred" type of this method, which owes its development to the late managing director of the Compagnie d'Assurances Générales, we learn from Mr. Gilman that "This life, fire, and marine insurance company formerly suffered much from the competition of newly-formed companies, which drew away its best men by the promise of a larger salary. In 1850, M. de Courcy proposed a scheme for the establishment of a Provident Fund, which should have the effect of retaining in the service of the Company all its employees whom it desired to keep" (*Profit-sharing*, p. 159). No employee receives any advantage from this Provident Fund until he has worked twenty-five years for the house, or is sixty-five years old. The result has been that "the company has succeeded perfectly in holding its servants throughout their working career" (*ibid.*, p. 160). Deferred Participation, which is now in force, in a more or less complete form, in numerous Continental profit-sharing establishments, can hardly be said to have, as yet, had an adequate trial in this country.

CHAPTER XXI.

THE RELATION OF PROFIT-SHARING TO THE WAGE-SYSTEM.

The theory and the practice of Profit-sharing having now been set forth, it will be proper to offer a few observations upon the position occupied by this method of remuneration in relation to the ordinary wage-system, and to consider in what respects this method appears capable of effecting an improvement on that system, whether from the point of view of the interests of the employers or from that of the interests of the employees.

At the outset, it may be well to examine the objections made to, and the claims made for the profit-sharing method on the grounds of general equity. Perhaps the most frequent of the criticisms passed upon Profit-sharing, regarded as a means of promoting the interests of the employer, is the observation that it is unfair to give the employees a share in profits, while they are allowed to remain free from any obligation to bear any part of the losses incidental to

business transactions. In answer to this objection it might be urged, that, assuming the accepted theory of Profit-sharing to be correct, the employees of a profit-sharing firm are, in fact, to a certain extent (quite apart from any provision that may be, and, as has been seen, sometimes is made for retaining a part of their bonus in order to build up a Reserve Fund to meet future losses) virtually liable to share in any losses which may be made by their employers. For, under the accepted theory of Profit-sharing, the bonus is not a free gift, but a *quid pro quo*. Now, if at a time when losses are incurred and when, consequently, no bonus can be distributed, the employer continues to get his *quid*, whether in the shape of increased zeal displayed by his employees, or in "holding" the employees in his service, or in detaching them from the trade union, or otherwise, then, since the employer will be getting this *quid* without the payment of any *quo*, to that extent his employees will, in effect, be bearing a share in the losses of the firm.

Certainly, when we remember that, as has been laid down by Mr. Sedley Taylor, the "expectation, that a direct interest in ultimate results will stimulate to improved exertion, and thus open an entirely new source of profit, is the economic basis in which the participating system rests,"* the proposition, not uncommonly advanced, that where there is Profit-sharing, there should also be Loss-sharing, in other words, that an employee, who has been induced by the hope of receiving bonus to give to his employers,

* *Report of Industrial Remuneration Conference*, p. 256.

say, one shilling's worth of work for every tenpence paid to him in wages, ought, in addition to losing his bonus in a bad year, to give up part of his earnings as a contribution towards meeting losses incurred by his employers, will scarcely appear altogether equitable.

If, however, Profit-sharing is to be regarded, not (as it is viewed by the accepted theory of the method) as a system under which extra zeal is purchased by the promise of a bonus, but as a system under which the employer, by generous gifts in good years, allows his men to share in the windfalls of industry, then it can scarcely be denied that arrangements ought, in fairness to the employer, to be made for the employees to contribute towards meeting losses. But, at the same time, it is impossible to ignore the fact that, if working-men are desirous of benefiting by the fluctuations of commerce, this is a desire for the fulfilment of which the non-co-operative wage-system offers opportunities at the least as advantageous as any, which are likely to accrue from the adoption of this proposed system of co-operative Profit-and-Loss-sharing. By means of the ingenious automatic machinery of the sliding-scale, the miner, although a "mere wage-earner," is enabled to share in the prosperity which "good times" confer upon the trade. The sliding-scale may or may not be an ideal arrangement from the point of view of the wage-earner; but it posseses one conspicuous advantage over any form of Profit-sharing. For, while under Profit-sharing the employee of an unfortunate or a badly-managed business, may, even in the best of times, fail to receive

any bonus (the firm by which he is employed having earned no profits), under the sliding-scale, on the other hand, the miner is entitled to receive an increase in remuneration proportionate to the rise in prices which has taken place, even though the particular coal-master by whom he is employed has, by making imprudent contracts for "forward delivery," at old, low prices, lost the benefit of the rise. Even where no sliding-scale exists, the same result is arrived at by the workmen demanding and obtaining a general rise in wages as soon as the state of trade leaves the employers "a good margin." * On the whole, it is beyond question that the method of Profit-sharing, if it is to be looked upon as a means of making the remuneration of labour correspond with the fluctuations of commerce, is inferior in point of equity and expediency to the ordinary, non-co-operative wage-system.

While the contention commonly put forward by hostile critics of the profit-sharing method, that the participation of employees in profits is necessarily unfair to their employers, seems untenable, the claim, which the advocates of Profit-sharing so frequently make, that the employee is in all cases entitled, as a matter of equity, to share in the profits of his employer, is one which can scarcely be considered altogether easy to substantiate. The employee, we are told, helps to make the profits; therefore he ought to share

* As to the manner in which in some cases profits are, in practice, taken into account in fixing piece-wage prices, see *ante*, pp. 71 *n*, 72 *n*.

in the profits. The sequence is not clear. By the joint efforts of employer and employed wealth is produced; and if the employee urge that he ought in equity to receive a fair share in this wealth, no one will gainsay him. But if the arrangement be that this share shall take the form of wages and wages alone, as is the case under the ordinary wage-system, on what grounds can this arrangement properly be stigmatized as inequitable?

The fact seems to be that those, who claim for the employee the prescriptive right to share in profits, do so from a conviction that there is something essentially degrading in the receipt of "mere wages." "All wages are charity," Mr. Holyoake, the historian of the British co-operative movement, once said to the writer; and Mr. Sedley Taylor speaks of the "moral gain to the workman in passing from the position of a mere wage-earner to that of an associate in profits."* What seems to lie at the root of this deprecation of wages as the remuneration of labour and this aspiration after "higher things" in the shape of a so-called "industrial partnership," is some sort of not very clearly thought out idea that, since in a democracy all men, whether employers or employed, ought to be treated alike, without invidious distinctions, therefore the old plan, under which the form of the employer's remuneration (profit) differs entirely from that of the employees (wages), must be given up, and workmen must be

* *Report of Industrial Remuneration Conference*, p. 256.

placed on a level with their master by an arrangement, under which a part, at any rate, of their remuneration shall in future take the shape of profit. Into abstract considerations of this nature we shall not enter in this place. But, since the most earnest advocate of the inalienable right of every employee to share in the profits of his employer would (it is to be presumed) hesitate to press this claim, unless it were reasonably certain that the position of the employee will be better under Profit-sharing than under the ordinary, non-co-operative wage-system, it appears proper, in relation to this matter, to inquire, to what extent this novel method offers to the employee advantages practically superior to those attainable under the wage-system.

With regard to all forms of "deferred" participation (in which the employee's bonus is retained by his employers, and is forfeited if he quit their service before the expiration of a specified term of years), it is possible to entertain a certain degree of doubt as to whether it is an unmixed advantage to a servant to be bound in this manner to his master. In the typical case referred to above (p. 285 *n.*) we have seen that the object, with which Profit-sharing in the deferred form was adopted in the French Insurance Office, in which this system was originated, was that of preventing rival companies from drawing away its best men by the promise of a higher salary. But is it not a disadvantage to a man to be fettered by the fear of forfeiting his claims under a Provident Fund in such a manner that he is prevented from increasing his

salary by either insisting that this salary shall be raised by his present employers, or else seeking employment on better terms elsewhere? Again, can we lose sight of the possibility of a man's being deprived of all his claims on the provident fund by a capricious dismissal, an occurrence which is—as I happen to know—by no means unheard of in the French insurance companies by which a system of this nature has been adopted? And is it wise for a man to put himself under pledges to suffer without a murmur any amount of persecution which may be inflicted upon him by his official superiors?

Of course, so far as the share in profits given to the employee is a free gift, the maxim "beggars must not be choosers" will apply; the employee must take his pension on the terms on which it is offered, or not at all. But so far as this share in profits is given either in exchange for a special degree of assiduity exhibited by the employee, or in lieu of that increase in salary, which by reason of the competition among employers for his services he might and would otherwise have obtained, it would not be unreasonable if he were to take objection to a system which forces him to leave his deferred pay in pawn, to answer for his complete and perpetual subservience to the will of his present masters.

That a system, under which a part of the employee's remuneration remains in the hands of his employers, liable to forfeiture if he quit their service, must render any attempt to improve existing conditions of employment by combination difficult if not

impossible will readily be conceded;* and with respect to all forms of Profit-sharing, the tendency of which is to detach the employee from his allegiance to, or to prevent him from joining the trade union organization, it may well be considered open to question, whether, in the long run, the advantage which employees derive from the receipt of a share in profits, may not, to a greater or less extent, be counterbalanced by their being deprived of those benefits which it is claimed that trade union combination is capable of securing. Nor should it be forgotten that, even in cases, in which the profit-sharing scheme has not been introduced with a view to weakening the influence of the trade union, and does not contain any of those special provisions which have in some cases been inserted with this object, the inevitable tendency of all exceptional methods is to get the men working under them out of line with their fellows.

No one, who possesses the smallest degree of familiarity with trade combinations, can doubt the importance of this last objection. Every combination, whether of masters or of men, exists for the purpose of securing the best terms available, and of securing the same terms for all its members, private arrangements between particular masters and particular sets of men being strongly discouraged as contrary to the

* "We think it will ever be difficult to consolidate organization in any body where a system of deferred pay, either in the form of perquisites or pensions, prevails" (*Report of the Parliamentary Committee of the Trades Union Congress*, 1890, p. 24).

spirit, and inconsistent with the success of the organization. Just as a masters' association, if it is to be successful, must be supported by all employers alike, even by those who are on the best of terms with their men, and just as a masters' association expects one of its members to assist it, if a general lock-out is declared, by discharging his workpeople, even though this employer may have no dispute with his employees; so too, if a trade union is to be successful, it must be vigorously supported by all the men in the trade, all of whom must not only keep up their subscriptions in time of peace, but must join in any general strike which may be declared.

Thus, it seems not improbable that, under existing circumstances, the adoption of Profit-sharing in any form may have a certain tendency to weaken the power of trade union combination, especially in trades and districts where trade unionism does not at present possess much strength.

So far as concerns the efficacy of the profit-sharing method in promoting the maintenance of industrial peace, the sanguine expectation, entertained by not a few enthusiasts, that the introduction of Profit-sharing is likely to suffice for the prevention of labour disputes, appears by no means certain of realisation. Such, at any rate, is the opinion of Mr. Denny, an employer of more than ordinary acuteness, who, in the preface to his *Worth of Wages*, says, "Industrial Co-partnerships have been much praised, and are with some people confounded with co-operative production. To me they seem utterly hopeless, and they

have certainly so far not been successful. They contain the germ of the old dispute of how much the workman is to get and how much the master, and the contest over this is simply transferred from the trade in general to the firm in particular" (p. 6). And the facts which have been set forth in the preceding chapter (pp. 282, 283) unquestionably tend to show that Profit-sharing is no sure preventive of industrial conflicts.

Indeed, while it does not seem highly probable that the introduction of Profit-sharing will be able to secure the avoidance of labour disputes of the ordinary type, the nature of the profit-sharing method is such that its general adoption, so far from decreasing the occurrence of industrial strife, might quite conceivably multiply the causes of difference between employers and employed. Profit-sharing implies that the employee shall receive, in the first place, as the remuneration of his labour in so far as that labour is of its normal efficiency, his usual rate of wages, and, in addition, as the reward of a special degree of efficiency, exhibited by him under the stimulus of Profit-sharing, or in exchange for some other advantage which his employer hopes to secure by reason of the introduction of this method, a share in the profits. What, then, is to happen if the employer announces that he intends to reduce wages? It may be that the employees are satisfied that the market value of their labour has gone down, and that, in consequence, they accept the reduction without complaint. But in many cases they will be likely to take a

different view, and then the usual means for resisting the reduction will probably be taken. But over and above any dispute about the rate of wages, is it altogether unlikely that the employees, becoming dissatisfied with the amount of their bonus, may go out on strike in order to obtain an increase in their share in profits? So long as Profit-sharing is adopted by a few firms only, the bonus will be regarded as a generous gift and accepted without its amount being too severely criticized; but if this form of remuneration were to become common, it is certainly not improbable that the employees would, before long, take to looking the gift-horse in the mouth; and then to the all too lengthy list of "causes or objects" of industrial disputes we shall have to add the novel category —"strikes to obtain a larger share in profits." *

Whatever may be the efficacy of the profit-sharing method as a means of securing industrial peace, the

* In addition to the question what share in profits the workmen are to have, there are other matters, concerning which disputes might easily arise between profit-sharing firms and their employees. Take, for example, the question, What are the divisible profits of a given year? which may be briefly illustrated by the Briggs case already referred to (*ante*, p. 282). There the employees were to get one-half of the net profits remaining after the shareholders had received 15 per cent. In 1873 the fund available for distribution as bonus was decreased, because £30,000 out of the earnings of the last year was invested in a mine, the shareholders getting new shares, but the employees losing £15,000 of bonus. In this case also "in addition to the sums divided [as profits], large amounts were placed to depreciation and reserve funds, altogether out of proportion to what is usual, and the men were thereby deprived of the share which ought to have come to them as bonus" (*Co-operative Production*, by B. Jones, p. 497).

chief merit universally claimed for Profit-sharing by its advocates is the stimulus which it affords to the display by the employees of a more than normal degree of activity and usefulness. Let us, then, investigate the supposed superiority of Profit-sharing to the wage-system as a means of calling forth and of rewarding special efficiency, whether in the form of intensity of exertion or of the avoidance of waste. The economic basis of "stimulus participation," as we have already seen (*ante*, pp. 255, 256) is the assumption that the increased zeal, which the workmen are induced to display, "enables profits to be obtained under a participating system which would not accrue under the established routine." What, then, is the share in profits which the theory of this method proposes should be allotted to the employees? To this important question the advocates of Profit-sharing have furnished only a very imperfect answer. For they have told us the *maximum*, but not the *minimum*, share which is to be allotted to the employee.

The total amount paid away in bonus is in no case to exceed the money value of the abnormal, additional services which the hope of earning this bonus may be expected to induce the profit-sharing employees to render to their employer.* In the emphatic and precise words of Professor Nicholson, "Under the stimulus of Profit-sharing the workers must create

* "The fund on which participation draws is the surplus profit, realised in consequence of the enhanced efficiency of the work done under its stimulating influence" (Sedley Taylor, *Profit-sharing*, p. 41).

the additional profits which they are to receive" (*Contemporary Review*, January, 1890, p. 68). Profit-sharing, therefore, is a method under which the employee is asked to do, say 20 per cent. more work than at present, while the employer offers that, *if the profits of the business shall allow it*, the remuneration of the employee shall be increased by an addition in the shape of bonus to the extent of not more, in any case, than 20 per cent., and to the extent in most cases of very much less than 20 per cent. For Mr. Sedley Taylor expressly states that, as a rule, a part only of the extra profits created by the stimulus of Profit-sharing is given up to the employees (*Profit-sharing*, p. 66). At the same time, no exponent of this industrial method has yet laid down any rule as to the smallest share in these extra profits which the profit-sharing employer shall give to his workmen. If he can get a sovereign's worth of extra zeal by paying a bonus of ten shillings, or even of two shillings, then the employer will be able to adopt this course, with the satisfaction of knowing that he is acting in perfect consonance with the theory of Profit-sharing —a method which, to use the lucid language of Mr. Gilman, "keeps the interests of the employer in view throughout" (*Profit-sharing*, p. 436).

That, in cases suitable for its application (for there are many kinds of labour, to the remuneration of which this method is not well adapted, because all that is required from the employee is a certain regular *minimum* of work, his due performance of which is easily ascertainable, and is capable of being secured

by the fear of dismissal) Profit-sharing may promote the interests of the employer, seems clear. Profit-sharing supplies an inducement to men on time-wage not to dawdle over, and to men on piece-wage not to scamp their work, while waste of material is discouraged. Thus, it has been shown that if the workmen of the South Metropolitan Gas Company see coals spilt, they say, "That will not do; that goes against our Profit-sharing." * This example is especially interesting, because it well displays the influence of that element to which Profit-sharing owes so great a part of its success—the element of collectivity. Each employee has a direct interest, not only in doing his own work well, but in seeing that his fellow-workmen do their work well. Each man thus becomes a foreman in relation to every other man. Even the regular superintendents of labour are themselves superintended by their subordinates; and I have known workmen in a profit-sharing house to report a foreman to the heads of the business for neglect in the discharge of his duties. Under circumstances such as these, the claim which is made for the method of Profit-sharing, that the extra efficiency, which the system induces the workers to exhibit, augments the normal gains of a business to an extent amply sufficient to cover, or more than cover, the amount paid away in bonus, is shown to be well founded. But the important question remains to be considered, whether the increased efficiency and

* See *Evidence before Labour Commission*, Group C., Vol. III., pp. 241, 242.

economy, which this method claims to produce, might not in many cases be equally well produced by some form of the existing wage-system, and that with greater advantage to the employee than is likely to accrue to him under the novel co-operative plan, which proposes the partial substitution of profits for wages as the remuneration of labour.

Let us test the matter by a concrete instance. Here is a pair of boots, the ordinary piece-wage for making which is 8*s*. I want my workman to take especial care with this pair, which will involve his spending fifteen hours instead of twelve over the job; as he would say, I want "more work put into the boots" to the value of 2*s*. I tell the workman that I expect to be able to sell the boots at a net profit of 10*s*, and I ask my man whether he will have (in addition to his ordinary wage) 2*s* when he "shops" the boots, or 20 per cent. of my (expected) profits at the end of the year. Can anyone doubt the answer? The workman knows that I may fail to realise my profit of 10*s* for many reasons, all of them matters with which he has nothing to do. I may have given too much for the raw material; I may have designed the boots badly, so that no purchaser will look at them; or I may be foolish enough to trust an insolvent purchaser who cannot be induced to pay for the boots. One would hardly think of asking the tanner to forego part of the price of the leather in consideration of a promise of part of the profits to be realised on the sale of the finished article. Why should the workman make a bargain of this nature?

The workman sells his labour as the tanner sells his leather, for better or for worse, at a fixed price. The price of the craftsman's labour is his wages. Profits are the price of another kind of labour—labour in which the employee takes no part. Profits are the piece-work remuneration of management and enterprise.

The main test of the all-round efficiency of any method of industrial remuneration is generally admitted to be found in the degree in which it succeeds in securing a due proportion between the price of labour on the one hand, and the quantity and quality of that labour on the other, including in the elements which go to make up the quality, not alone careful workmanship, but also the avoidance of waste. In short, the object aimed at is the perfection of payment by results. Now, all forms of piece-wage involve payment by results, the remuneration of the workman being proportionate to the quantity of the work performed, and also to its quality, so far as this quality can be ascertained by the critical inspection of an experienced foreman. If, however, either because the employer fears that his men may be induced to maintain a rate of speed incompatible with careful execution, or for any other reason, it be considered undesirable to put them upon simple piece-wage, then the operatives may be employed under some form of progressive wages,* receiving, in addition to a fixed time-wage, a supple-

* See *ante*, Chapters VII. and X.

ment, the amount of which is contingent upon the efficiency, quantitative, qualitative, or both, of the labour performed, while the avoidance of waste can, in like manner, be promoted by prizes for economy in the use of material.*

Observe, that the ordinary, non-co-operative wage-system, whether in the form of simple piece-wage or of progressive wages, can be applied, not alone to men working single-handed, but also to men working in

* The plan of giving extra-wages for special services can be applied in a great variety of forms. Thus, while, one of the principal merits claimed for Profit-sharing is that (as in the Maison Godin, see Gilman, *Profit-sharing*, p. 180) this system stimulates the workmen to invent new tools, appliances, and methods of working, that the same result can be produced, without adopting any form of Profit-sharing, by offering prizes for inventions, is shown by the case of Denny's ship-building workmen. After a system of giving rewards for inventions had been in force for seven years, Mr. Denny stated "that in that time as many as 196 awards had been given for inventions which were thought useful to adopt, that three times that number had been submitted for consideration, and that besides being beneficial in causing so many useful improvements to be made, the scheme had the effect of making the workmen of all departments into active thinking and planning beings instead of mere flesh and blood machines" (*Contemporary Socialism*, by John Rae, second edition, p. 322); for a later account of the working of this system, see *The Engineer*, January 6th, 1893. The Yale and Towne Manufacturing Company (see *ante*, pp. 137, 138) have "a system of premiums paid for valuable inventions, which the company reserves the right to purchase. In 1888 fourteen premiums were awarded, aggregating 600 dols. [£125]. In 1889 the result was similarly successful" (*Sixth Report of Connecticut Bureau of Labour Statistics*, p. 227). An account of a system of rewarding inventions in force with Messrs. Jardine, manufacturing engineers, of Nottingham, will be found in *Printing and Kindred Trades Monthly Advertiser*, February 1st, 1895.

groups, the method of collective wages possessing to the fullest extent that important element of mutual supervision, to which, as already remarked, the method of Profit-sharing owes so much of its efficacy; for under any and every system of collective wages, whether progressive or simple, each member of the group is under a strong incentive to do his best to induce his neighbours to exert their utmost endeavours in order that the amount of the joint remuneration may be as high as possible. ("Hurry up, do you think I am going to carry you on my back?" is a form of remonstrance which I have known to be used by an indignant member of a group of workmen employed on collective piece-wage to his less active mate.) Nor should it be forgotten that in one important respect the mutual supervision of the employees by each other can be far more efficaciously promoted under the wage system than under the method of Profit-sharing. For experience proves that, if you want to secure that this kind of mutual supervision shall be exercised in a vigorous manner, you must make the groups, to which the collective system of remuneration is applied, fairly small (compare *ante*, pp. 124-126 and 146). This, of course, you can do under a system of collective wages; but under a profit-sharing scheme the group-unit is the whole body of employees—a body so large that, since no one can be sure that, while he is doing what he can to increase the profits of the firm by the display of special activity and carefulness, a number of his co-employees, employed perhaps in a distant part of the factory,

are not taking things easy, and leaving it to him to earn a big bonus for them, it is in the highest degree probable that many men will not trouble themselves to work with more than normal diligence.

It should also not escape attention that, as experience proves, the sooner after a job is completed that you can pay your bonus, the more efficient will this premium be as a stimulus. Where, however, the employees have to wait for their bonus until the end of the financial year, as is the case under Profit-sharing, the strength of the incentive to activity, which the hope of earning bonus affords, is seriously impaired by the delay in its payment.

One not altogether unimportant advantage, which an ordinary wage-contract possesses over a profit-sharing agreement, is the superior legal efficiency of the former arrangement. If an employer withhold wages due, including, of course, any sums due in respect of a premium on production, the employee can obtain the assistance of the law. But if the share in profits, to which a man is entitled under a profit-sharing scheme, is unpaid, can he recover it by legal proceedings? Most profit-sharing schemes expressly stipulate that the bonus is to be a mere gratuity, no legal rights in respect thereof being conferred upon the employee. In France it has been held that, under circumstances such as these, an employee cannot invoke the aid of the law in order to obtain his bonus; and it would appear from the remarks of Mr. Rawson that in his opinion an employee would, under any scheme

containing a stipulation of this nature, be unable to recover his bonus in the courts of this country.*

But the most noteworthy of all the respects, in which this novel method compares unfavourably with the old-fashioned wage-system, is the manner in which Profit-sharing offends against that cardinal principle of industrial remuneration which demands "that every man shall receive his own reward according to his own labour." For while, under the ordinary wage-system, the remuneration of the labour of the employees is made wholly independent of the ultimate financial results of the business—results which depend, in the main, on the skill and industry, not of the workmen, but of their master—under the method of Profit-sharing, it is quite possible that the workman who, in the hope of earning "bonus to labour," has done work 10 per cent. in excess of the normal standard, may, even under a liberal scheme, find that, instead of receiving an addition to his normal wages of, say 7 per cent., the bad management of his

* "Some words such as those introduced in brackets [not of legal right but gratuitously] are wisely introduced into every set of profit-sharing rules, so as to maintain the employer's right to impose such restrictions as he may think fit, and to prevent as far as possible the risk of subsequent complaints by the employees against those restrictions. *They are clearly incompatible with the notion of a binding contract*, and it has been so held in the French Courts of Law" (*Profit-sharing Precedents*, p. 35, note *b*); see also *L'Association de l'Ouvrier aux Profits du Patron*, by Paul Bureau, p. 141. Compare the case of the Briggs Collieries (see *ante*, p. 282) in which the workmen were threatened that, if they stayed away from work on a certain day (in order to attend a trade union gathering), the shareholders might deprive them of their bonus for the past year.

employer has reduced his bonus to so low a level that he has to be content with a supplement equivalent to only 2 per cent. on his wages, or that, as has been the case in a large proportion of the schemes, particulars as to which have been furnished to the Labour Department (30 per cent. in 1894, 25 per cent. in 1895, and 32 per cent. in 1896; see *ante*, p. 278), no bonus whatever is forthcoming.

If I am to do 10 per cent. more and better work than I did last year, why not offer me a 10 per cent. increase in my wages, subject only to its being shown that my work exhibits a 10 per cent. improvement? * Why tempt a working-man to gamble by staking part of the reward of his labour upon the financial results of a business over the conduct of whose financial operations he is not allowed to possess any control, and would, perhaps, seldom be competent, even if he were allowed, to exercise any useful control? For working-men to run risks of this nature must, speaking generally, be considered to be somewhat imprudent, even in those cases in which the bonus is paid in cash at the end of the year. But, where, as is often the case, a large part of the bonus is placed to the credit of a Provident Fund, and, as such, becomes part of the permanent capital of the business, there it is clear that a working-man, whose

* The reader of Mr. Gilman's book will notice that in several instances Bonus-giving or Profit-sharing has been abandoned in favour of some system of progressive wages (Kaufbauern cotton-mills, Borchert Brass Works, Thode Paperworks, Berlin Anhalt Railway Co.).

savings are locked up in an unsecured investment of this nature, must, in many instances, run a very grave risk of losing his money. Is the workman expected, before he accepts employment in a profit-sharing firm, to make inquiries from his stock-brokers or his bankers as to the standing of the concern and as to the reputation for business ability possessed by its directors? Or is he to "chance it?" We may well demur to inviting working-men to hazard their earnings in this manner, whether for one year or for forty.

Many of the British firms, which have adopted Profit-sharing, are houses of unimpeachable solidity; and, it cannot be doubted that in many cases it is the specially energetic heads of specially prosperous houses who, having at their disposal larger profits than their competitors, are the first to venture upon the experiment of stimulating the zeal of their employees by offering them a share in profits. Still, the frequency of financial disasters among the small number of British firms which have adopted Profit-sharing cannot have escaped the reader (see *ante*, p. 280). What we have to consider is, how far the general adoption of this method would produce satisfactory results, if it were adopted, not in a few special and exceptional cases, but generally throughout the length and breadth of this Empire.

One of the employees of a somewhat celebrated London firm, formed with the express purpose of giving to its employees a large share—no less than 55 per cent.—of its profits, but which during all the

ten years of its existence never earned profits sufficient to enable it to give one farthing as bonus to these employees, upon being requested by the manager to show his appreciation of the benefits, which the novel method was intended to confer upon him, by displaying a special degree of assiduity, replied that "he should prefer to take his bonus as he went along." This workman, who asked for bonus on output instead of "bonus to labour," would appear to have had good grounds for preferring the substance of wages to the shadow of profits as the remuneration of industry.

At the same time, it is right to remark that there are many cases, in which the method of Profit-sharing surpasses in important respects any form of the ordinary wage-system. This observation applies especially to those cases, in which it is practically impossible to measure the extra value of special zeal and of special care otherwise than by the figures of the profit and loss account of the firm, and in which, therefore, it would not be practicable to stimulate and reward a more than normal degree of assiduity by offering to the employees a bonus on output in the nature of progressive wages. In all probability the number of such cases is by no means so large as is generally supposed. The reader, who possesses a certain degree of familiarity with the complex and minute calculations, which are, as a matter of fact, made by almost every competent manufacturer, both in estimating the probable cost of production before work is done, and in checking the actual cost incurred, will readily grant that, in a very large number of cases, no considerable

difficulty would be experienced, if it were desired, with a view to stimulating the zeal of employees, to introduce some appropriate system of bonus on output in the nature of progressive wages. While, however, in cases suitable for its application, the system of paying bonus on the efficiency of labour irrespective of the rate of profit realised appears superior in point of fairness and efficacy to the novel method of paying bonus to labour contingent on and varying with the profits of a business, yet, in cases in which practical considerations make the introduction of a system of progressive wages impossible, there it is indisputable that, when the circumstances admit of its adoption, the method of Profit-sharing may reasonably be considered to possess advantages not easily attainable under any other system and entitling it to favourable consideration in the interests alike of the employer and of the employees.*

* Some of the principal advantages, which are usually claimed for the method of Profit-sharing, are not noticed in the text for the reason that these advantages have, in reality, no necessary connection with this method. I refer, in particular, to the promotion of thrift and the provision made for sickness and old age, which are found when part of the bonus to labour is retained as a contribution to Pension and Provident Funds. It is clear that deferred pay may exist quite as well in the form of wages as in the form of a share in profits; and, as a matter of fact, many non-profit-sharing firms promote, and even enforce, thrift and providence by establishing funds of this nature, to which they not infrequently make contributions, sometimes on a liberal scale.

CHAPTER XXII.

THE THEORY OF INDUSTRIAL CO-OPERATION.

We now pass from Profit-sharing to Industrial Co-operation. As has been pointed out in a previous chapter (XVII.), Profit-sharing is a method invented by the middle-class mind in conformity with the ideas of the middle-classes, while Industrial Co-operation is a method conforming to a democratic, working-class ideal. Profit-sharing proposes to leave the control of the business in the hands of the employer and to give to the operatives a part only of the profits of the business; but Industrial Co-operation proposes that the entire control of the business shall be in the hands of the workmen themselves—the workmen, that is, engaged in the co-operative business—and that the whole of the profits shall be at the disposal of these workmen. Industrial Co-operation, in short, aims at bringing about the self-employment of the workmen and, as a necessary corollary (since wages can only be

paid by a master to a servant), the total abolition of the wage-system.*

In order that the reader may be in no doubt respecting the accuracy of this description of the co-operative

* The workmen employed by co-operative societies do, of course, receive wages. But we must bear in mind that, as will be shown in the next chapter, these societies do not, in fact, carry out the co-operative ideal of self-employment, as conceived, for example, by Thornton and Mill (see quotations *post*, pp. 312, 313), their membership being by no means confined to the persons employed by these concerns. If, however, a co-operative society were to be formed in exact accordance with this ideal, then no part of the earnings of its members could properly be considered to come within the category of wages, as the term is understood by economists. The sums which are paid, week by week, by a duly registered co-operative society to its employees are, indeed, in all cases alike, wages in the eye of the law, this being due to the fact that such a society, has, in law, a corporate personality, distinct from that of its members. From the point of view of economic analysis, however, these weekly sums, if paid by a co-operative society exclusively composed of persons working for the society, would necessarily be considered not as wages, but as advances on account of the ultimate partnership earnings of the associated workmen. Self-employment, in short, and the receipt of economic wages cannot co-exist. In point of fact, very little is heard from practical co-operators or from the advocates of Industrial Co-operation generally of the total abolition of wages as a factor in the actual organization of co-operative undertakings, because it is not expected that this organization will be consistent with the co-operative ideal. But that the aim of Industrial Co-operation is to abolish the wage-system is beyond doubt. Accordingly, in the report on workmen's co-operative associations for "production", recently issued by the French Office du Travail, the scope of the inquiry is defined to be "to measure the efforts made by the workmen *to substitute for the 'wage-system'* the close association of capital and labour—to put into the hands of the workmen and other servants employed in industrial enterprises the joint direction and the entire profits of these concerns" (*Les Associations Ouvrières de Production*, 1897, p. 5).

method, it may be well to justify it by a brief reference to the past history of Industrial Co-operation and to the current authorities upon this subject. What, as a matter of historical fact, is the nature of the co-operative method, is abundantly clear. Though Robert Owen was the theoretic father of Industrial Co-operation in this country, and though there were co-operative societies in existence long before the opening of the Toad Lane Store in 1844, yet the practical pioneers of the British Co-operative Movement of to-day were the twenty-eight members of the "Equitable Pioneers" Co-operative Society at Rochdale. The aims of this society were, from the first, declared to include the employment of its members; and, as soon as they had obtained the necessary capital (in 1854), the Rochdale co-operators commenced co-operative manufacture by starting a cotton-spinning mill, declaring—"The object of the Rochdale Co-operative Manufacturing Society is to provide *arrangements by which its members may have the profits arising from the employment of their own capital and labour.*"*

The method of industrial organization and remuneration contemplated in the programme of our early working-men co-operators was that described in a well-known passage by Thornton: "For the complete realisation of this idea certain things are essential. A number of workmen, having contrived to procure the needful tools and raw material, must agree to work

* Cited by Mr. Holyoake, *The Co-operative Movement To-day*, p. 92.

together at the same trade, under directors chosen by themselves from amongst themselves, and must further agree that the entire net proceeds of their industry shall be divided in some pre-arranged proportion among all who have contributed, whether by their labour or their capital or by both, to the joint production." * So, again, we read in the *Political Economy* of J. S. Mill: "The form of association which, if mankind continue to improve, must be expected in the end to predominate, is not that which can exist between a capitalist as chief, and workpeople without a voice in the management, but the association of the labourers themselves on terms of equality, collectively owning the capital with which they carry on their operations, and working under managers elected and removable by themselves." †

It may be remarked, in passing, that, when Mill lays it down that the members of a co-operative association shall *own* all the capital employed in the business, he goes a good deal further than appears necessary. It is generally admitted that, although the co-operative ideal of "self-employment" cannot be realised unless the co-operative workmen are the exclusive owners of all such capital the ownership of which carries with it the right to participate in management (that is to say, all *share* capital), yet there is nothing at all inconsistent with this ideal in their borrowing capital in the ordinary way from outsiders. Thus, in the report of the French Office du Travail on

* Thornton *On Labour*, p. 396.

† *Political Economy*, fourth edition, p. 344; sixth edition, p. 352.

workmen's co-operative associations for "production" already referred to, the "normal type" is defined as presenting certain characteristic features, including, as to the ownership of the capital, the following: (1) "The share capital (*not including loans at fixed rates of interest*) must belong to workmen engaged in the particular trades carried on by the concern; (2) workmen and other servants engaged in other trades may be shareholders when actually employed by the concern; (3) persons, who fulfilled the above qualifications at the time when they became shareholders, may retain their shares until their death, but the shares cannot be transferred to the representatives of a deceased shareholder or any other persons except workmen or servants fulfilling such qualifications. The first condition, that the shares shall be held exclusively by workmen in the trades carried on by the society, shows that all the shareholders ought to be in a position to be employed by the society, when the business has extended sufficiently to provide them with employment." *

* *Les Associations Ouvrières de Production*, 1897, p. 13. That the shares in a co-operative association for "production" must be held exclusively by workmen belonging to the trade carried on by the association is a condition strongly insisted upon by the practical co-operators in France. Thus, a co-operative association of joiners, which originally numbered among its members two persons not joiners by trade, was obliged, by a decision of the Co-operative Union of Productive Societies, declaring that, in order to be eligible as a shareholder in a co-operative group, it was necessary to be a worker in the trade carried on by that group, to get rid of these outsiders (see the Labour Department *Report on Co-operative Contracts*, 1896, p. 130 *n.*). The French official report above referred to shows (pp. 517,

It is also worth noting that, while Thornton expressly insists that the managers of co-operative workshops must be chosen by the workmen "*from amongst themselves*," Mill would apparently allow the associated workmen to elect as their manager an outsider, not necessarily a working-man.

Turning from the exponents of economic theory to practical working-class co-operators, we shall find an explicit account of the system of Industrial Co-operation given in the passages from Mr. Holyoake's *History of Co-operation*, which have been quoted in explanation of the co-operative ideas by Professor and Mrs. Marshall in their *Economics of Industry*. "In former times," says this eminent co-operator, "capitalists hired labour, paid it its market price, and took all profits. Co-operative labour proposes to reverse this process. Its plan is to buy capital, pay it its market price, and itself take all profit."* Thus, a co-operative business is one "in which labour hires capital, devises

561) that practically the whole of the share capital of the French co-operative associations for "production" is held by persons who are workmen belonging to the particular trades carried on by the societies in which they hold shares, the proportion of this capital not so held being less than 3 per cent., and this 3 per cent. being almost entirely accounted for by certain shares issued by a co-operative society in respect of a joint-stock business which the society took over, and which are to be ultimately transferred to the co-operative workmen by gradual purchase. From the details given in the *Report on Co-operative Contracts*, 1896, it will be seen that the Italian co-operative associations for "production" are also composed of workmen belonging to the particular trades carried on by the different societies.

* *History of Co-operation*, by G. J. Holyoake, Vol. II., p. 87.

its own arrangements, and works for its own hand."* Workmen, who intend starting a co-operative factory, "first save, accumulate, or subscribe all the capital they can as security to capitalists from whom they may need to borrow more, if their own is insufficient. . . . . They hire, or buy, or build their premises; engage or appoint managers, engineers, designers, architects, accountants, or whatever officers they require, at the ordinary salaries such persons can command in the market, according to their ability. Every workman employed is paid wages † in the same way. If they need capital in excess of their own, they borrow it at market rates according to the risks of the business—the capital subscribed by their own members being paid for at the same rate. Their rent, materials, salaries, wages, business outlays of all kinds, and interest on capital, are the annual costs of their undertaking. All gain beyond that is profit, which is divided among all officers, and workmen, and customers, according to their salaries or services." ‡

If we wish for a more detailed account of the principle upon which Industrial Co-operation proposes that the division of the profits of a co-operative factory shall be made, we can find this in the words of Mr. Benjamin Jones, late secretary of the Southern Section of the Co-operative Union (the central organization of our working-men co-operators), and joint author with the Right Hon. A. H. Dyke Acland, M.P., of

* *History of Co-operation*, by G. J. Holyoake, Vol. II., p. 122.

† See *ante*, p. 311 *n*.

‡ *History of Co-operation*, by G. J. Holyoake, Vol. II., pp. 123-124.

that recognised text-book, *Working-men Co-operators*. "The following division seems to me, after long and careful study, to be a near approach to a perfect standard for productive associations. The purchases of a consumer release the capital locked up in the stock-in-trade. It is therefore equivalent to so much capital, and the annual amount of purchases should share the profits in the same proportion as would the like amount of capital. A working-man is like a horse in being live capital. In the case of slaves, the master owns both the man and the horse, and the market settles the capital value of each. In the case of the British working-man, the fact, that he owns himself, makes him none the less equivalent to a given amount of capital. This amount may be arrived at by considering his yearly wages as the interest on his capital value. Dividing the wages by the rate per cent. of interest allowed on capital, the result, or quotient, is the number of hundreds of pounds that the working-man may be said to be worth. For instance, with interest at 5 per cent. a man with £50 a year would be equal to £1,000 of capital; and with interest at 6 per cent. a man at £78 a year would be equal to £1,300 of capital. Having thus ascertained the value of the worker, the customer, and the capitalist, in one common denominator—capital—the profit could be divided among them in proportion to the amount of capital each individual represented."*

* Lecture, "What is meant by Co-operation?" *The Claims of Labour*, p. 60. See these principles of division of profits set forth

From the authorities which have been cited, and which, if space permitted, might be reinforced by further quotations from the writings of co-operative leaders and of political economists,* it will be seen that the method of organization and remuneration contemplated by Industrial Co-operation is an arrangement, by which a body of workmen may employ themselves, providing † the capital which they require and dividing the profits of the undertaking in equitable proportions agreed upon between them.

also in *Co-operative Production*, by J. C. Gray, the secretary of the Co-operative Union, pp. 9 and 10; and compare *Manual for Co-operators*, edited by Thomas Hughes, and E. V. Neale, the late secretary of the Co-operative Union, and published in pursuance of a resolution of the Co-operative Congress, pp. 142-143.

* See *The Wages Question*, by Francis A. Walker, edition of 1886, pp. 262, *et seq.*; the same author's *Political Economy*, third edition, pp. 341, *et seq.*; *The Relation of Labour to the Law of To-day*, by Lujo Brentano, American translation, pp. 98, *et seq.*: and compare *Le Società Cooperative di Produzione*, by Ugo Rabbeno, pp. 423, *et seq.*; and *Distributing Co-operative Societies*, by Luigi Pizzamiglio (English translation), pp. 177-185, and the authorities there cited.

† By their cash or their credit; see *ante*, pp. 313, 314.

CHAPTER XXIII.

THE PRACTICE OF INDUSTRIAL CO-OPERATION.

The theory of Industrial Co-operation having been explained in the preceding chapter, it will now be necessary to inquire into the manner in which this theory is carried into practice; and for this purpose we will pass in review the different forms in which Industrial Co-operation exists.

First we have the companies owning the numerous and important co-operative cotton mills at Oldham. These companies are joint-stock concerns, formed under the Companies' Acts, with shares of £1 to £10. As is the case in regard to British Industrial Co-operation generally, the voting power is in most of these undertakings irrespective of the amount of capital held by each shareholder, the rule being "one man, one vote." Many, perhaps most of these companies were started by working-men; and, at any rate up to within a comparatively recent period, a considerable part of their capital belonged to working-men; though it may be remarked, that these workmen usually

preferred to hold shares in a mill in which they themselves were not employed. Of recent years the shares in these companies have been more and more passing into the hands of middle-class capitalists. In these "Working-class Limiteds" scarcely a trace of "self-employment" remains. With respect to the question of Profit-sharing, we are told, in the case of the Sun Mill, that "Profit-sharing with the principal employees was introduced in 1869; in 1875 it was discontinued. . . . . Mr. Marcroft, the historian of the Sun Mill, adds that the recipients of bonus had been reduced in their wages, and that on its discontinuance their wages were raised 20 per cent."* For many years past none of these co-operative cotton-mill companies have practised Profit-sharing in any form.

Passing from the "Working-class Limiteds" to the main body of Industrial Co-operation, we will examine its various forms, and see to what extent the cardinal principles of the co-operative theory are carried out in actual practice. For this purpose we will construct, from details† furnished by the Labour

* *The Co-operative Movement in Great Britain*, by Beatrice Potter (Mrs. Sidney Webb), pp. 129, 130. Of late years it has been somewhat the custom not to include these Oldham mills in speaking of Industrial Co-operation; but that they were originally considered as co-operative is proved, and that they ought still to be considered as co-operative is maintained by Mr. B. Jones, one of the highest authorities on this subject; see his speech as Chairman of the Co-operative Congress of 1889 (*Report of Congress*, p. 21), and his *Co-operative Production* (1894), pp. 252-309.

† See *Labour Gazette*, November, 1897, p. 327; the figures stated in

Department, a bird's-eye view of the co-operative associations comprised in the most recent statistics published by that Department—"the Workmen's Co-operative Societies in the United Kingdom . . . for the year ending December 31st, 1896." The different classes of societies referred to, all of which, with very few exceptions, are registered under the Industrial and Provident Societies Act, will be shown by the first of the Tables which follow; while the number of persons employed by each class is stated in the second of these Tables.

the *Gazette* have been re-grouped for the purposes of this book, the necessary particulars to enable this re-classification to be made having been supplied by the courtesy of the Labour Department of the Board of Trade.

Table I.

(Showing number and kinds of Co-operative Societies at the end of 1896 *included in the statistics of the Labour Department, November,* 1897).

Nature of Societies.	Number of Societies.	Number of Members.	Amount of Sales in 1896.		
			Distributive	Productive.	Total.
			£	£	£
Retail Societies	1,470	1,380,051	36,976,235	2,650,183*	39,626,418
English Wholesale Society	1	1,044	11,115,056	1,299,833*	12,414,889
Scottish Wholesale Society	1	491	3,822,581	819,395*	4,641,976
Corn Milling.....	9	7,358	—	1,070,843	1,070,543
Consumers' Baking Societies †	22	8,598	—	327,077	327,077
Irish Dairying	56	4,082	—	285,190	285,190
Irish Co-operative Agency	1	40	110,726	—	110,726
Various Manufacturing Societies ‡	112	18,359	—	1,157,917	1,157,917
Total.....	1,672	1,420,023	52,024,598	7,610,638	59,634,736

* In the case of production by Retail Societies having productive departments (495 out of the 1,470 Retail Societies referred to in the Tables set forth in the text), or of the Wholesale Societies, the goods are not sold direct from the manufacturing departments, but are transferred to the distributive departments.

† In the Labour Department figures, the group, "Bread-baking and Food Preparation," includes, in addition to these twenty-two consumers' associations, three societies formed primarily in the interests of the producers, which are here included in "Various Manufacturing Societies."

‡ In the Labour Department figures, the group, "Various Manufacturing Societies," includes two concerns of middle-class origin (Wm. Thomson and Sons, referred to *ante*, pp. 274-276, and Brownfield's

Table II.

(*Showing number of persons directly employed at the end of* 1896 *by Co-operative Societies included in the statistics of the Labour Department, November*, 1897).

Nature of Societies.	Number of Persons directly employed at end of 1896.		
	In Distribution.	In Production.	Total.
Retail Societies	35,427*	9,398	44,825
English Wholesale Society	1,514	5,277	6,791
Scottish Wholesale Society	753	3,311	4,064
Corn Milling.....	—	394	394
Consumers' Baking Societies †	—	987	987
Irish Dairying	—	275	275
Irish Co-operative Agency	9	—	9
Various Manufacturing Societies ‡	—	7,054	7,054
Total	37,703	26,696	64,399

While to attempt to give any detailed account of the past history or the present position of the societies referred to in the Tables just set forth would be beyond the scope of a book treating only of the

Guild-Pottery), which are not included in the Tables set forth in the text, these businesses being in this book treated as examples of ordinary Profit-sharing and not of Industrial Co-operation; see also the preceding note.

* In some cases the number employed was not stated. In these cases an estimate has been made.

† See note † to Table I. on the preceding page.

‡ See note ‡ to Table I. on the preceding page.

method of remuneration, it will be proper to give some explanation of the distinction between these various forms of Industrial Co-operation.* The "Retail Societies" (usually termed "distributive" associations) are formed with the primary object of retailing to their customers (who in most cases hold shares in the "store") groceries and other articles not manufactured by these societies; but some of them possess manufacturing ("productive") depart-

* With respect to the distinction between "distributive" and "productive" Co-operation, the writer takes these terms as he finds them used in the common parlance of the practical co-operators, but submits that this kind of classification is by no means satisfactory. For "distribution" and "production" are, in truth, not distinct classes of operations. Thus, the traveller, who sells the boots made by a "productive" co-operative society to a "distributive" co-operative society, is just as much a "producer" as the bootmakers by whom the boots were made; while the salesman, who sells these boots across the counter of the "store," possesses a no less valid claim to be considered a "productive" worker. What is meant by "production" is the production of utilities, and this includes "distribution," which is, in effect, the transfer of articles from a place, where they are not directly useful, to the hands of the consumer, by whom these articles will be used. (See *Principles of Economics*, by Professor Alfred Marshall, second edition, pp. 114, 115.) For practical purposes a more serviceable classification would be that, which distinguishes between "consumers' associations" (*i.e.*, societies which are carried on by purchasers of goods in order to promote their own interest as consumers) and "producers' associations" (*i.e.*, societies carried on, or intended to be carried on, by persons engaged in the manufacture of goods in order to promote their own interests as producers). It is, however, maintained by Professor Pantaleoni that neither of these modes of classification is correct, and that the two so-called classes of co-operative associations are, in reality, undistinguishable, the one from the other (*Giornale degli Economisti*, April, 1898, pp. 308, 309).

ments, in which they make a certain part of the goods which they sell. The two Wholesale Societies (English and Scottish) are confederations formed by the "distributives" for the purpose of supplying goods to these stores; the greater part of the articles sold by the Wholesales are bought by them from outside manufacturers and dealers, but each Wholesale owns certain "productive" departments—factories in which a part of the goods required are produced. The Corn Mills are, in the main, associations formed, like the Wholesale Societies, on federal lines in the interests of the consumers, for the purpose of supplying flour, &c., to stores. The twenty-two Consumers' Baking Societies are also carried on in the interests of the consumers, by whom they were created. The Irish Dairying Societies are formed by farmers for the purpose of manufacturing butter from milk supplied by these farmers, and for disposing to advantage of other dairy produce of their farms. The Irish Co-operative Agency is a federal institution, whose object it is to assist the co-operative dairies in putting their output on the market. The "Various Manufacturing Societies" are associations for carrying on different branches of manufacture, formed (with few exceptions) primarily in the interests of the producers.

Now let us examine these various groups of societies, and see how far they approximate to the ideal of Industrial Co-operation, as explained in the preceding chapter. The Retail Societies, after paying to their shareholders a fixed rate of interest (generally 5 per cent., but sometimes less), usually allot the

whole of their remaining profits to their customers in proportion to the amount purchased by each, as rebate, or "dividend on purchase," shareholding customers receiving a "dividend" at double the rate paid to non-members; but by a certain number of these societies a share in their profits is allotted to their employees. Thus, out of the 1,470 Retail Societies included in the statistics of the Labour Department * and referred to in the Tables set forth above (*ante*, pp. 322, 323), the particulars stated in the *Report of the Co-operative Congress*, 1897, show that 229 paid a bonus out of their profits to their employees in 1896, the sums so paid as bonus amounting to £22,525, while the amount, which these profit-sharing Retail Societies paid in that year as wages was £328,969.

It will be seen that the number of retail co-operative societies, which are shown to practise Profit-sharing is not very large, forming about $15\frac{1}{2}$ per cent. of the whole number,† and that the bonus paid by these

* The 1,470 Retail Societies mentioned in the figures of the Labour Department include 1,435 of the 1,453 "distributive societies" mentioned in the *Congress Report* (omitting two because they are really "productive" societies, and sixteen because they made no Returns), and, in addition, one society classed in the *Congress Report* as "special," but really a "distributive" society, and thirty-four Irish Agricultural Societies, classed by the *Congress Report* as "productive," but in fact formed for the common purchase of goods.

† That the number of profit-sharing retail co-operative societies and the total amount paid as bonus to their employees may be slightly smaller in reality than as above stated is possible, because it may well be that some of the bonus referred to in the *Report of the Co-operative Congress*, 1897 (from which the figures given in the text

229 profit-sharing societies to their employees in 1896 formed an addition of, speaking roughly,* about 7 per cent. to the ordinary wages of these persons.

It is, unfortunately, impossible in the figures just stated to distinguish between the bonus paid in the "distributive" branches of the stores and that paid to the persons employed in store workshops. All that can safely be said is, that a certain number of the stores pay to their salesmen, &c., a bonus on their wages, which is often given at the same rate as the rebate or "dividend" paid to members on the amount of their purchases, and is in some cases a certain proportion of the surplus profits of the society remaining after paying the fixed interest on share capital.†

have been compiled) was really bonus on output (commission on sales, &c.) irrespective of the rate of profit realised, the two kinds of bonus being sometimes inadequately distinguished. Thus, when the Co-operative Union a few years ago sent out to the district associations affiliated to the Union a circular intended to ascertain which of the "distributive" societies practised Profit-sharing, the question asked was "Is there any system of Profit-sharing in force in your district, either by way of *commission*, bonus, or otherwise?" (*Report of Co-operative Congress*, 1891, p. 38). Compare also the cases of commission on sales, &c., specified by co-operative societies as instances of Profit-sharing mentioned below (p. 329 *n*); and see note † (as to Model Rules) below.

* This percentage cannot be stated with exactness, because the wages of *participants in bonus* are not distinguished; it is, however, believed that the number of non-participants is not large.

† It may be observed that the Model Rules for a "distributive" society issued by the Co-operative Union provide that the net profits shall, in the absence of any contrary direction by the society, be divided between the members on their purchases, non-members on their purchases at not more than one-half the rate on members' purchases, and "the employees of the society at such rate, not less

Whether, with regard to the employees of those retail co-operative societies which pay bonus to labour in "distribution," it could safely be asserted that the whole of this bonus is a clear addition to their normal remuneration is extremely doubtful. For with regard to shop assistants there is no recognised standard rate of pay; and it appears fairly certain that in a considerable number of instances the employees of these profit-sharing retail co-operative societies consent, in consideration of their right to receive bonus to labour, to accept lower wages than they would otherwise demand and obtain.*

than ¼*d.* in the £ on the gross sales, and ½*d.* in the £ on the net profits, as the ordinary business meetings fix, to be divided among them as such meetings direct." The curious manner, in which the payment of commission on sales (a bonus irrespective of the rate of profit realised) is here blended with Profit-sharing, will not escape attention.

* At a quarterly meeting of the English Wholesale Society a few years ago a delegate said that in the store, which he represented, they had tried Profit-sharing. "The reason they dropped it was this. When they wanted employees they advertised, and, when an applicant came before the board, he was asked, 'What salary do you want?' One would say 'I will come for 30*s* a week.' Then he was asked—and this was a board of men from the working-class—'Are you aware that we pay bonus to labour?' 'I was not aware of that; how much?' 'Generally 10 per cent., 2*s* in the £.' 'Oh, well, if you pay 2*s* in the £, I will come for 27*s* per week.' And then they say they are paying bonus to labour." The Chairman said that he knew the same thing was done in other societies (*Co-operative News*, June 20th, 1891). The writer has known a co-operative store to admit its shop assistants, but not its workmen, to a share in profits, the reason given for the exclusion of the latter being that these operatives belonged to a strong trade union and so had to be paid full wages; therefore they could not expect to receive in addition a share in profits.

As to Profit-sharing in the "productive" departments of stores, this practice obtains in a certain number of cases, though it would appear probable that the payment of bonus to labour is less common in the case of the workmen employed in the workshops attached to stores than in that of the salesmen, &c., employed in "distribution."* In the *Labour Gazette*, December 1897, p. 358, it is stated that "the number of retail distributive societies, which are engaged also in production, is about 550, of which 495 made sufficiently

* It seems clear that the practice of admitting employees, whether engaged in "distribution" or in "production," to participation in profits has of late years been increasing among the retail co-operative societies. For when the inquiry as to how far this practice prevailed was made in 1890-91 (as stated above, p. 327 *n*), the number of these societies being then 1,418, the result was that "about sixty societies state that they share profits with their employees," and no doubt some of these were societies which did not practise Profit-sharing, but paid commission on sales (see *ante*, p. 327 *n*). As to Profit-sharing in the workshops of "distributive" societies, it appears from the Report of the Co-operative Central Board for 1889 (*Co-operative Congress Report*, 1889, p. 28) that, an inquiry having been addressed to each of the 798 societies included in the Co-operative Union, asking whether it "admitted the workers employed by it productively to any share in the profits," only 199 societies sent any reply, of which only sixty-one possessed "productive" departments. Of these sixty-one societies ten only claimed to practise Profit-sharing; but the claim of three must be disallowed (two cases of commissions on sales, one of extra-wage, not contingent on profits), while three more give no details as to the method which they practise. The remaining four are alone clear cases of Profit-sharing, and two of these societies are baking societies, which ought to be classed separately from the retail "distributive" societies, and in the *Co-operative Congress Reports* of 1889 and subsequent years are classed as "productive," and not as "distributive" associations.

complete returns for 1896 to be tabulated," and that £1,817 was allotted in 1896 out of their profits to their employees engaged in "production" by fifty-three of these societies. The bonus thus distributed was at the rate of 6·4 per cent. on the amount paid to these employees in wages in 1896 by these societies.*

If, as will have appeared, the right of the employees to share in the profits, which is one of the two main features of the co-operative ideal, is only to a somewhat small extent recognised in the practice of the co-operative store societies, the second of these features—the self-employment of the workers—is yet more conspicuous by its absence.

So far from the co-operative store being managed by the salesmen working in the store or by the workmen employed in its workshops, we find that the rule adopted by the famous pioneer society at Rochdale provides, "No servant of this society shall serve any office in the committee of management, nor be allowed to vote for any candidate for the committee of management, or be an auditor, on any account whatsoever." And Mrs. Sidney Webb tells us that "the disqualification of employees for official positions has become a constitutional principle with working-men's stores throughout the country, while

* For the ratio of bonus to wages mentioned above I am indebted to the courtesy of the Labour Department. It will be remarked that the ratio is that between the amount of the bonus and the wages of *all* the employees of these societies engaged in "production," it not being possible to distinguish the wages of *participants in bonus*; but the number of non-participants is believed to be not large.

their disfranchisement as voting members obtains as a custom, a resolution, or a rule in some of the largest and most successful societies." * It must be added that some stores will not even allow their employees to be members of the society. In many societies near relationship to an employee constitutes a disqualification for holding official positions.†

The English Wholesale Society, which the figures set forth above show to be by far the most important of all our workmen's co-operative societies, gave Profit-sharing a short trial many years ago, but does not now allot any share in its profits to its employees. Nor are these employees in a position to share in the management of the society either as directors or as ordinary shareholders, the entire control of the society's affairs resting with the 1,044 co-operative associations of which the English Wholesale Society is composed.‡

The Scottish Wholesale Society has for many years given a share in its profits to its employees. From November, 1870, to November, 1884, the bonus was a percentage on wages at double the rate of the

* *The Co-operative Movement in Great Britain*, by Beatrice Potter (Mrs. Sidney Webb), p. 75.

† Compare *Co-operative News*, April 13th, 1895, p. 367.

‡ Of course, an employee of the English Wholesale Society, who is one of, say, 2,000 members of one of the 1,044 associations which compose the English Wholesale, may be said to have by virtue of his membership of this constituent association some very slight voice in the management of the Wholesale's affairs; but the degree of control, which he is thus capable of exercising, is so insignificant as to be, for all practical purposes, a negligible quantity.

"dividend on purchase paid to customer members;" then an arrangement was made that employees in the "distributive" departments should receive a similar rate per £ on their wages as should be paid per £ on members' purchases, and those employed in the "productive" departments should be "paid in accordance with the profits made in those departments in the aggregate in the following manner: The net profit, after meeting all charges including interest on capital employed, is divided at so much per £ equally between purchases and wages earned." * But in 1892 the rule, that the bonus to employees in both "distributive" and "productive" departments shall be at the same rate as the dividend on members' purchases, was adopted, and has remained in force. At the same time, the previous practice of paying the whole of the bonus to employees in cash was altered. The employee is now required to leave one-half of his bonus with the society, to bear interest at 3 per cent., and to be withdrawable only when the employee leaves the service of the society. The ratio, which the bonus paid to its employees by this society has borne to their wages during the period, November, 1870—December, 1896, has been about $3\frac{3}{4}$ per cent. in the case of the employees in the "distributive," and about 4 per cent.† in the case of the persons employed in the "productive" departments of the society.

* *The Co-operative Wholesale Societies Limited, England and Scotland: Annual for* 1893, p. 157.

† The years 1885 and 1886 are, in the case of the employees in the "productive" departments, omitted from calculation, no details in

The Scottish Wholesale Society has, since 1892, allowed its employees to become shareholders, each being permitted to hold from five to fifty shares of £1 each. By the rules of the society the shareholding employees are entitled to send one representative to the quarterly meeting, and one for every 150 employees who become shareholders (each representative being entitled to give one vote). At the end of 1897 266 of its employees held between them 4,308 shares, and were entitled to send two representatives to the business meetings of the society.* The other members of the Scottish Wholesale Society are co-operative societies, numbering 288 at the end of 1897.* Each of the societies, which hold shares in the Scottish Wholesale, has one vote in right of membership, an extra vote for the first £1,000 worth of goods bought by it in the year from the Wholesale, and one other additional vote for every complete £2,000 worth of goods so bought after the first £1,000; the total number of votes possessed by these societies may be reckoned to be about 2,400.* Under these circumstances, the employees of the Scottish Wholesale (4,605 in September, 1897—859 in the "distributive," and 3,746 in the "productive" departments†) will be seen to possess only a very insignificant voice in the management of this great concern.

respect of the ratio of bonus to wages in these two years being available.

* See the *Annual Return* of the Scottish Wholesale Society for 1897.

† See *The Co-operative Wholesale Societies Limited, England and Scotland: Annual for* 1898, pp. 159, 160.

The next class of co-operative associations, which it is our duty to examine, is the Corn Mills; these are consumers' associations—in the main, federations of store societies; and no attempt is made to allow their employees to control the management of these concerns, of which one only allots to its workpeople any share in its profits, this exception being the Colne Vale, which, in 1891-96, paid a bonus equivalent to 2·2 per cent. on wages.*

The twenty-two co-operative societies classed as "Consumers' Baking Societies" are concerns, in which the workmen employed have, as a rule, little, if any, voice in the management, though in the case of one society special arrangements for giving the employees a share in the control of the society's affairs have been made. This is the United Baking Society, of Glasgow, whose employees have formed a Bonus Investment Society, to which they hand over money which has been received by them as bonus out of the profits of the United Baking Society, to be invested by the new association in the shares of that society. The Baking Society, at the end of 1891, altered its rules so as to allow the Investment Society to become federated with it, and to have one vote by virtue of membership, and one additional vote for each £80 of capital invested with it by this association. By virtue of these arrangements, the employees of this society possess a share, although only a very small share, in the management of its

* See *Co-operative Congress Reports*, 1892-97.

affairs.* The bonus paid to its employees by the United Baking Society — the only one of these twenty-two consumers' baking associations which shares its profits with its employees† — has, in the period, 1890-96, been at the average rate of 8 per cent. on their wages.‡

The fifty-six Irish dairying societies mentioned in the Tables set forth at pp. 322, 323 above provide by their rules for the allotment to their employees of a share in their profits. So far as can be seen from the Returns published in successive *Co-operative Congress Reports* by the Co-operative Union, the extent, to which the employees of these dairying societies have benefited by these arrangements

* The latest available figures (August, 1897) show that of the 830 workpeople employed by the United Baking Society, 275 had become members of the Investment Society, and that the amount invested by this society in shares of the United Baking Society was £2,900 (*Co-operative Workshops in Great Britain*, 1897, by Thomas Blandford, p. 53). According to the *Co-operative Congress Report*, 1897, the United Baking Society, at the end of 1896, had as its members, in addition to the Investment Society, seventy-five other societies, and its sales for that year were £220,536. Each of these seventy-five societies has one vote in right of membership, and one additional vote in respect of every £160 of purchases made by it from the Baking Society.

† Of the two other baking societies, which from the figures given in the *Co-operative Congress Report*, 1897, appear to practise Profit-sharing, one—Hamilton Baking—abandoned Profit-sharing in September, 1896, while the other—Kettle Baking—does not practise Profit-sharing, the sum stated in this *Report* to have been paid by this society as "bonus to labour" being (as indeed an analysis of the columns of the *Report* will suggest) stated in error.

‡ See *Co-operative Congress Reports*, 1891-97.

appears to be inconsiderable. Out of this total of fifty-six, the six societies mentioned in the Table printed below are the only societies making returns to the Co-operative Union for 1896, which are shown by the *Co-operative Congress Report*, 1897, to have paid bonus to their employees in 1896. The Table states, so far as the particulars can be ascertained, what has been the addition made to the wages of the persons employed by these six dairying societies by the bonus which has been paid to these employees.

PROFIT-SHARING BY IRISH DAIRYING SOCIETIES.

Name of Society.	Number of Employees at end of 1896.	Average Ratio of Bonus to Wages in years specified below.		Ratio of Bonus to Wages in 1896.
		Years.	Per cent.	Per cent.
Ardagh Dairy	6	1891 & 1896*	0·8	1·7
Clouncagh	6	1893, 1895, 1896†	1·7	2·5
Feenagh	6	1892 & 1896‡	3·5	7·0
Grange	12	1893, 1894, 1896§	4·1	3·3
Lissarda	4	1892, 1895, 1896‖	3·3	10·0
Newcastlewest	5	1895 & 1896¶	2·5	2·5

It is to be noted that in these Irish dairying associations the rule is, that the sums paid to the employees

* Details wanting for 1892-1894; no return for 1895.
† Details wanting for 1891, 1892 and 1894.
‡ Details wanting for 1891, 1893 and 1894; no return for 1895.
§ Details wanting for 1892; no return for 1895.
‖ Details wanting for 1893 and 1894.
¶ Details wanting for 1891-94.

as bonus "shall not be paid in cash, but shall be accumulated as a loan in the society, bearing such interest as any general meeting may determine, and shall only be withdrawable in case of distress or leaving the employment of the society." No attempt is made to facilitate the acquisition of shares by the employees; and it may be taken, that the control of the societies' affairs rests with the farmers, by whom they have been formed, and that the few employees, who are in their service, have practically no share in the management of these undertakings.

The last class of co-operative societies, with which we have to deal, is that of "Various Manufacturing Societies." Of these 112 "productive" societies, twenty-one are concerns, which do not give any share of their profits to their employees, and make no attempt to carry out, in relation to their servants, the principles of Industrial Co-operation. Among these twenty-one non-co-operative co-operative societies is the Rochdale Manufacturing Society (see *ante*, p. 312), by far the most important of these "Various Manufacturing Societies," which for some years after its formation in 1854 practised Profit-sharing, but abandoned the system in 1862.* Taking these twenty-one non-profit-sharing societies together, we may state their total membership at the end of 1896 to be 2,560 (2,104 individuals and 456 societies); at the same date their aggregate capital was, share and loan capital, £186,701, reserve

* The history of this cotton factory is given in *Co-operative Production*, by B. Jones, pp. 260-265.

and insurance funds, £2,672; their sales in 1896 were to the amount of £301,579; their profits in 1896 were £9,807; the number of their employees at the end of 1896 was 1,421; and the amount, which they paid for salaries and wages in 1896, was £93,211.*

The remaining ninety-one societies comprised in this group of "Various Manufacturing Societies" have all adopted some system of sharing profits with their employees, and exhibit in their practice a certain degree, greater or less in different cases, of approximation to the principles of Industrial Co-operation. The total membership of these ninety-one more or less "self-governing" workshops at the end of 1896 was 15,799 (13,515 individuals and 2,284 societies); their aggregate capital at that date was, share and loan capital, £447,330, reserve and insurance funds, £43,057; their sales in 1896 were to the value of £856,338; and their profits for that year amounted to £36,685. These societies employed in all 5,633 persons at the end of 1896; and the amount, which they paid in that year for salaries and wages, was £265,985.

Although the whole of these ninety-one "productive" associations agree in allotting to their employees some share in their profits, yet with respect to the lines, upon which the division of the profits is made, the greatest possible divergence exists between the methods adopted by different associations; and it

* For these figures and the corresponding statistics relating to the ninety-one profit-sharing "productive" societies the writer has to thank the courtesy of the Labour Department.

would not be feasible, within available limits of space, to enumerate all the various methods of division adopted in different cases. As a rule, the purchaser gets back a part of the price of the goods which he has bought from the society in the shape of a "dividend," the percentage of the profits thus surrendered being different in different cases; by some, however, of these societies the claim of the customer to share in the profits is entirely ignored. The share capital, in nearly all cases, takes a fixed rate of interest, generally from 5 to $7\frac{1}{2}$ per cent., sometimes without any further right to share in the profits; very often, however, the share capital takes both a fixed interest, and also a proportion of the profits, this proportion varying widely in different cases. With regard to the proportion of profits allotted to the employees, a very great variety of methods of division obtains. In some cases a specified fraction, often about 40 or 50 per cent., but sometimes more, of the surplus profits (remaining after payment of the fixed interest on capital and in many cases after providing for a Reserve Fund) is given to the employees as "bonus on wages." Sometimes, again, these profits, or a portion of these profits, are divided between shareholders and employees in the proportion which the share capital bears to the aggregate sum of the wages earned in the year by the employees, or in that which the fixed interest on the share capital bears to the total amount of the wages, rateably at so much in the pound (one-half only of the wages of employees not members of the society being in some cases thus

brought into the account and such employees then getting bonus at one-half the rate paid to the employees who are members), or in such proportions that the share capital takes two shares to every one share taken by the employees; in other cases they are divided between the employees and the customers according to the relative amount of wages and of purchases, or between shareholders, employees and customers at an equal rate per £ on capital, wages, and purchases. In some cases, in addition to the share in profits allotted as "bonus on wages," a further share is devoted to the maintenance of a Provident Fund for the benefit of the employees.*

Certainly, the circumstances of different businesses vary so much, that it would not be reasonable to expect an uniform basis of dividing profits to obtain in all cases alike. It might, however, be expected that through all the divergent methods of division adopted in different instances, some underlying principle, governing the ascertainment of the share in profits to be assigned to the employees in accordance with the theory of Industrial Co-operation, might be traced. But any attempt to discover in the practice of Industrial Co-operation any general principle, applied, with due regard to the circumstances of each

* In addition to the profit-sharing arrangements for the benefit of the employees generally, it is common with societies of the type now under consideration to allot a portion of their profits to the committee of management and a further fraction to remunerating members for special services rendered to the society; provision is also frequently made out of the profits for social and educational purposes.

case, in the rules of all these more or less "self-governing" associations meets with a great degree of difficulty.

It remains to be added that the share in the total fund available for distribution as bonus is divided between the participants in proportion to the amount earned as wages by each (non-member employees, as already stated, sometimes taking bonus at one-half the rate of that allotted to employees who hold shares in the society), and that, while in some societies of the type now under consideration the employees' "bonus on wages" is paid to them in cash, in numerous instances the bonus is allotted in the form of share capital; sometimes all bonus is so paid, in other cases the employee's bonus is payable in cash after he shall, by means of the bonus payments, have become the owner of share capital to a specified amount, in some cases being obliged in this manner to take up one £1 share only, in others being required to invest his bonus in shares up to an amount varying from £5 to £50.

Leaving on one side the principles, upon which the method of Profit-sharing is applied in the practice of this branch of Industrial Co-operation, what, it is natural to ask, has been the actual addition to the ordinary wages of the persons employed by co-operative societies of the "self-governing" type made by the "bonus to labour," which these employees have received? The answer to this question, so far as the very imperfect details at our disposal make it possible to supply an answer, may be gathered from

the details given in the Table which is printed in Appendix C., *post*, pp. 405-419, and which contains particulars (names, nature of business carried on, date of establishment, amount of sales in 1896, number of employees at the end of 1896, and ratio of bonus to wages), in relation to seventy-one societies of the type now referred to.* In compiling this Table the basis taken has been the Returns published, in the *Reports* of the annual Co-operative Congress, by the Co-operative Union—Returns which, although the Union does the best it can with such materials as it finds it possible to obtain, are very incomplete, and occasionally inaccurate, but which still give, in regard to the ratio of bonus to wages in these associations, more and better information than can be obtained from any other source which it is possible to utilise. The figures as to the ratio of bonus to wages are, in

* All societies of the type now under consideration, which made Returns to the Co-operative Union for 1896 are included in the Table, with the exception of four associations (the Nottingham Tailors, the Rushden Trade Boot and Shoe Society, the Scottish Farming, and the Street Boot and Shoe Society), which, since the Returns were made, have passed resolutions to wind up. Since that date the Kent Brickmaking Society has caused its registration under the Industrial and Provident Societies Act to be cancelled, having now registered itself under the (Joint-Stock) Companies' Acts, and has thereby given up its profit-sharing rules, but its name is retained, because it is thought likely that the new company will revive the profit-sharing scheme. The Burnley Self-Help Society has also gone into liquidation, but is, it is understood, likely to be re-constructed on the old lines; its name is therefore also included in the Table. The date of establishment of each society mentioned in the Table is given from the *Reports of the Chief Registrar of Friendly Societies.*

relation to each society, taken back for as many years as the details published by the Union make possible; the year 1887, however, is omitted, because no statistics as to 1887 were published, the figures being considered by the Union too unsatisfactory for publication. In addition to the average rate of bonus paid during this series of years, the ratio of bonus to wages in 1896 is separately stated.

Summarising the figures as to the ratio, which the bonus received by the employees of the associations referred to in the Table set forth in Appendix C. has borne to their wages (figures, for which, owing to the circumstances just explained, it is impossible to claim any great statistical value, but which are given as the best available), we find the details to be as follows:—

Ratio of Bonus to Wages. (1)	Number of Societies, in which the average ratio of Bonus to Wages in the whole period covered by the statistics was the percentage shown in Col. 1. (2)	Number of Societies, in which the ratio of Bonus to Wages in 1896 was the percentage shown in Col. 1. (3)
Not stated, or details wanting.....	6	20
Nil	22	15
Under 1 per cent.....	6	—
1 and under 5 per cent.	21	18
5 ,, 6 ,, ...	6	6
6 ,, 7 ,, ...	1	4
7 ,, 8 ,, ...	3	3
8 ,, 9 ,, ...	1	1
9 ,, 10 ,, ...	1	1
10 ,, 11 ,, ...	2	3
15 ,, 16 ,, ...	2	—
Total	71	71

To put the matter shortly; if we take the sixty-five societies, as to which the ratio of bonus to wages is known for the period specified in the Table printed in Appendix C. (this period varying in the case of different societies according to the age of the society and the completeness or incompleteness of the Returns which it has made to the Co-operative Union), we find that, while twenty-two societies failed to pay any bonus at all, twenty-seven paid a bonus at the rate of less than 5 per cent. on wages, and sixteen paid a bonus at the rate of 5 per cent. or upwards, the mean rate in all these sixty-five cases, taken together, being 3 per cent.; while, if we take only the forty-three cases in which a bonus was paid, we shall find that the bonus was in these cases at the mean rate of 4·6 per cent. on wages. With regard to the bonus paid in 1896, out of fifty-one societies, for which information on this point is available, fifteen failed to pay any bonus, in eighteen cases the ratio of bonus to wages was less, and in eighteen cases more than 5 per cent., the mean rate in all these fifty-one cases, taken together, being 3·6 per cent.; while, if we regard only the thirty-six cases in which a bonus was paid in 1896, we find the ratio of bonus to wages in these cases to have been at the mean rate of 5·1 per cent.*

* In reference to the figures as to the ratio between bonus and wages in the "self-governing" co-operative associations, it may be well to point out, in the first place, that, if any comparison be made between these figures and those furnished above (*ante*, pp. 276-279) with respect to the bonus paid by ordinary profit-sharing firms, it

In the ideal co-operative workshop the co-operative workmen are to share the profits and manage the business, uncontrolled by any "outsiders" (not employed in the workshop). What is the practice of the ninety-one co-operative "productive" associations, which approximate more or less closely to the ideal type, in respect to Profit-sharing, has been shown. The question, to what extent the co-operative plan of the "self-government" of the workmen is carried out in the practice of these ninety-one associations, is one, to which the available information provides nothing like an adequate answer.

In the book on the Co-operative Movement,* which

ought to be borne in mind that the figures as to the bonus paid by the co-operative associations named in the Table set forth in Appendix C. and summarised in the text do not, except in the case of the Edinburgh Printing Co., which carries the whole of the employees' share in profits to Provident Fund, include sums carried to Provident Funds (see *ante*, p. 340) which exist in some of these associations; while in the figures given as to the ratio of bonus to wages in profit-sharing firms, sums credited under a profit-sharing scheme to a Provident Fund are included (together with any cash distribution) in the amount of the bonus. As to the amount of the sums allotted to Provident Funds by the societies (other than the Edinburgh Printing Co.) mentioned in that Table, from information supplied by the courtesy of the Labour Department it is possible to state that twelve of these societies allotted to Provident Funds out of their profits in 1896 the total amount of £487. In the second place, it must be remembered, that the conditions of labour, both as to wages and hours, prevailing in these co-operative workshops may in many cases be taken to be, on the whole, superior to those generally obtaining in the trade.

* *The Co-operative Movement in Great Britain*, by Beatrice Potter (Mrs. Sidney Webb), pp. 117-169.

Mrs. Sidney Webb published in 1891, it was proved by a careful analysis of the facts, including a statement of the relative number of the employees of societies of the "self-governing" type who were, and who were not, shareholders in the societies, by which they were employed, and of the relative number of the members of these societies, who were respectively employees of the several societies and "outsiders,"* that the co-operative theory of the government of the workmen by themselves was not, as a matter of fact, carried out in the practice of these associations. Only a small proportion of the shareholders in these societies (Mrs. Webb showed) were persons employed by them; comparatively few of their employees (as her figures demonstrate) were shareholders; in many societies no member of the committee was an employee; in numerous instances employees were forbidden to serve on the committee. Since her book was published, no attempt has, it is believed, been made to furnish any precise statement of the facts necessary to enable an accurate opinion to be formed upon the present state of this important question. But no one, who has watched the recent developments of Industrial Co-operation, can doubt that, since Mrs. Webb's acute criticism of the Co-operative Movement was compiled, a decided change in the direction of the acquisition

* Also of the proportion of the capital of these societies, which was owned by employees of the societies and by "outsiders" respectively. This, however, is not a point of great importance in regard to the question of voting power, since the rule "one man, one vote" prevails (see *ante*, p. 319).

by the workmen employed in these co-operative associations of an increased voice in their management has taken place.

True it is, as was said in his presidential address at the Co-operative Congress of 1891 by the Right Hon. A. H. Dyke Acland, M.P., that "the ideal co-operative productive society, where all the capital is owned by the workers, is admitted to be an impossibility, except in the rarest cases." * At the same time, an examination of the share ledgers of these "self-governing" associations would, it is believed, show that the proportion of their shareholders who are persons employed by them, and the proportion of their employees who hold shares in the society in whose workshops they are employed,† is considerably larger

* *Report of the Co-operative Congress* of 1891, p. 5.

† The shares in our co-operative societies generally are of small amount, most usually of £1 each, and can be paid up by small instalments. It is the rule in these societies (though this does not apply to the co-operative cotton mills at Oldham) that no limit shall be put to the issue of share capital, it being accepted as a principle of working-class co-operation that the share-list shall never be closed. In some cases certain restrictions exist as to who may take shares; but in practically all cases the employees of the "self-governing" productive societies (subject, in some instances, to their proving their capacity as workmen) are allowed to take up shares, issued to them without limit, on application. In a few instances it has occurred that such employees have, without reasonable ground, been refused shares (see *Co-operative Production*, by B. Jones, pp. 410-413); but this practice is now almost unheard of. It may be mentioned that a co-operative society loses its claim to exemption from income-tax (which societies registered under the Industrial and Provident Societies Act enjoy), if it limits the number of its shares (see Industrial and Provident Societies Act, 1893, sec. 24).

now than in 1889, the year to which Mrs. Webb's figures relate, and that in a greater proportion of the total number of these associations one or more of the employees of the society sit upon the committee.

That some of the "self-governing" co-operative societies are still very far from carrying out in their integrity the principles of Industrial Co-operation cannot be denied. The Hebden Bridge Fustian Manufacturing Society, one of the most important of this group, forbids any of its employees to sit on its committee, while its rules provide—as also do those of another important association, the Leicester Hosiery Society—that the shares issued to its employees in respect of their share in the profits shall not give them a right to vote upon any question except that of the alteration of any rule relating to such shares. Among other societies, whose rules forbid their employees to sit on the committee, may be mentioned the (Manchester) Co-operative Printing Society, a large and successful concern (which also forbids a committeeman to vote upon any question affecting a relative in the society's employ) and the Airedale Manufacturing Society, a woollen manufacturing undertaking with a good trade.* Still, the total number of the "self-governing" co-operative associations, which forbid their workers to sit on the committee, is not very large; and although in

* In some of the cases, in which a "self-governing" society has by its constitution excluded from its committee all persons holding a place of profit in the society (this exclusion, it is to be supposed, covering the whole of its employees), it is impossible for any one

other cases the proportion of the employee committeemen is often limited by the rules (*e.g.*, the Leicester Hosiery and several other societies allow one member only of the committee to be an employee), in many cases no restriction is made in regard to this matter; and the present tendency appears to be to accord at least a fairly liberal measure of representation on the committee to the employees of a society of this type.

With regard to the share in the management of a "self-governing" society possessed by its employees as ordinary shareholders, in right of shares in its capital held by them, instances, in which any such restriction upon their full exercise of voting power as is enforced in the cases cited above (Hebden Bridge and Leicester Hosiery), are exceptional. It is, indeed, beyond question that the shares of the "self-governing" societies are to a very great extent held by persons who are not employees, including a large number of "distributive" societies, which are constantly investing a part of their surplus capital in these "productive" associations. In but few of these "self-governing" associations, it may be surmised, would it be possible for the employees, if all the non-employee shareholders put forth their full

acquainted with the facts to avoid the suspicion that this exclusion was not fully intended, and arose from the fact that a rule, originally framed with special reference to the managers of retail (store) societies, was incorporated in the constitution of the "productive" association by inadvertence, or at any rate without due consideration of the circumstances.

voting strength, to out-vote these "outsiders." On the other hand, it must not be forgotten that, with the rarest exceptions, the voting power of an individual in a co-operative undertaking is the same, whether he hold one share or one hundred shares—the rule of "one man one vote" (as already stated) prevailing in practically all cases. Where the shares are held by a society, and not by an individual, that society (voting by delegate) is in some cases allowed more than one vote (*e.g.*, one vote for every two hundred or fraction of two hundred shares, or for every one hundred or part of one hundred shares, or for every fifty shares); but in very many cases even a society is only allowed to have but a single vote, no matter how many shares it may hold. Consequently, the small proportion of the total share capital of a society held by its employees does not prevent their exercising a considerable influence in regard to the management of the society's affairs. As a fact, too, the persons present at a shareholders' meeting of one of these associations, will, as a rule, be found to consist to a large extent of its employees and partly of fellow-townsmen (very frequently personal friends of the employees, often workmen in the same branch of trade) who are deeply in sympathy with these employees; for, except in the case of some urgent crisis, many of the "outsiders" do not trouble themselves to attend. Under these circumstances, since proxy voting is not, save in very rare instances, permitted by the constitution of these societies (so that the votes of those shareholders only who are actually

present are counted), the employee members will usually be found to possess a very important amount of practical control over the management of the affairs of a society of this type.

It remains to state that, while these "self-governing" manufacturing associations, although very far from carrying out in any at all complete manner the cardinal principles of Industrial Co-operation, which require that the actual workers shall possess the entire management of the workshop, have in recent years displayed a decidedly increased approximation to the co-operative ideal, at the same time these associations have not alone increased in numbers, but have begun to exhibit a not inconsiderable degree of commercial prosperity. Against sixty-five "productive" associations of the "self-governing" type existing at the end of 1890, and comprised in the Returns published by the Co-operative Union in the *Co-operative Congress Report*, 1891, with sales to the aggregate value in 1890 of about £500,000, we find, in existence at the end of 1896, ninety-one similar associations, with aggregate sales in that year to the value of between £800,000 and £900,000 (see *ante*, p. 338). Success, indeed, has not come to all societies of this type in equal measure; many have altogether failed to achieve success. But, take them as a whole, the progress made by these "self-governing" associations during the last few years has been very remarkable.

CHAPTER XXIV.

THE RELATION OF INDUSTRIAL CO-OPERATION TO THE WAGE-SYSTEM.

Having in the preceding chapters examined first the theory and then the practice of Industrial Co-operation, we may now inquire, in what relation Industrial Co-operation, as it exists to-day, stands to the ordinary, non-co-operative wage-system. The great bulk of the businesses, which claim the title of "co-operative," exhibit, as we have seen, in regard to the method of remuneration adopted by them, no divergence whatever from the ordinary wage-system. The employees of the large majority of our workmen's co-operative associations are "mere wage-earners," taking no share in the profits of the enterprises which these associations carry on, and are—it is clear—as far from being "self-employed" as they would be if they were the servants of an ordinary middle-class joint-stock company.

A small minority, however, of our co-operative associations, although indeed very far from carrying

out that "abolition of the wage-system," which is contemplated by the ideal of Industrial Co-operation, yet make (as has been shown) some sort of attempt to conform to the co-operative principles, inasmuch as in the organization of societies of this type provision, more or less effective in different cases, is made for granting to the persons employed by these undertakings a share in the profits and in the management of these associations.

The tendency among that school of co-operators, by whom the type of Industrial Co-operation, which has just been referred to, is advocated, is to lay the stress, not so much on the practice of Profit-sharing, as on the admission of the employees to a share in control, their participation in profits being regarded as essential mainly because this participation emphasises the fact of their enjoyment of the rights and privileges of partnership. Thus, while the hope formerly entertained, that the salvation of the working-classes would be found in the development of a system, in which the workshop should be entirely owned and managed by the persons engaged in that workshop, dividing among themselves the entire profits of the industry there carried on, has been abandoned, the goal aimed at by these co-operators of to-day is what is termed "Labour Co-partnership." In the statement, which this school of co-operators puts forward "of that principle in industry for which we contend," it is declared that, "we advocate the co-partnership, that is the equal partnership, of Labour with Capital, the system under which, in the

first place, a substantial and known share of the profit of a business belongs to the workers in it, not by right of any shares they may hold, or any other title, but simply by right of the labour they have contributed to make the profit; and in the second place, every worker is at liberty to invest his profit, or any other savings, in shares of the society or company, and so become a member entitled to vote on the affairs of the body which employs him." *

The definition of the principle of Labour Co-partnership just cited is, it will be observed, wide enough to include, not alone the profit-sharing, "self-governing" type of Industrial Co-operation, but also all middle-class profit-sharing firms, which (as is the case with our profit-sharing joint-stock companies with hardly an exception) permit their employees, in common with the rest of the public, to purchase shares, and to acquire, by virtue of their ownership of these shares, the usual right of voting at general meetings. Thus, Labour Co-partnership will be seen to cover a somewhat wide field.

The suggestion, that the workman shall be permitted and encouraged by investing his profit-sharing bonus and what money he can save from his wages in the business in which he is employed, to obtain a voice in the management of the concern, has, it will readily be allowed, its attractive side. The picture of a form of industrial organization

* This statement of the meaning of "Labour Co-partnership" appears in each successive number of the monthly organ, *Labour Co-partnership*.

in which the workman and the capitalist shall co-operate as partners in one common enterprise, while it appears to afford a pleasing prospect of the banishment of industrial warfare, gratifies the sentiment of the employee by holding out to him the hope of a distinct and effectual recognition of his right to a share in the control of the business in which he is employed. To what extent the modifications of the ordinary relations between employer and employee under the existing wage-system, which the general adoption of this Labour Co-partnership plan would involve, would be likely to promote the real interests of the employer on the one hand, and of the employee on the other, is a question, the answer to which cannot be regarded as altogether free from doubt. This much, at any rate, appears to be certain. The advantages or the disadvantages which may be expected to arise from the introduction of the Labour Co-partnership plan must be considered separately, according as the concern, to which it is to be applied, is an ordinary middle-class business, or a workmen's association—a joint-stock company or a co-operative society.

So far as the profit-sharing side of Labour Co-partnership is concerned, the good points and the bad points of Profit-sharing, as compared with the ordinary wage-system, have already (Chapter XXI.) been sufficiently examined; and we may pass on to discuss the question of the share in the management, which the advocates of Labour Co-partnership wish to see the working-man acquire by investing his

bonus and his savings generally in the shares of the business in which he is employed.

It must be observed that, under existing circumstances, the degree of control, which it will be possible for the employees of a modern business concern to acquire in this manner, is, in most instances, unlikely to be of a very substantial nature. For, it may be taken for granted that the middle-class capitalists, by whom, of course, the great bulk of the shares will in most cases be held, would not listen for a moment to any proposal that the "one man, one vote" rule, in force with our workmen's co-operative societies should be introduced, so exposing themselves to being swamped by the votes of their servants. The middle-class shareholders will, usually, we may be sure, insist upon a strict adherence to the ordinary joint-stock rule, according to which the voting power is in proportion to the number of shares held by each shareholder. Accordingly, since the total number of shares, which we may expect it to be possible for the employees of a business to acquire, will usually be but a small fraction of the entire share capital, it is practically certain that, upon any question involving their interests, the employees are sure to find themselves hopelessly outvoted by the solid phalanx of capitalist shareholders.*

* Compare the case of the Briggs collieries (see *ante*, p. 282), in which Profit-sharing was adopted in 1865. A large number of the workmen employed by the company held shares, special arrangements being made for them to have shares allotted to them at less than the market value, and share clubs formed to aid workmen in

While the practice of investing their money in shares, if generally adopted by working-men, would seldom secure for them anything like a dominating, or even an effectual voice in the management of the concerns by which they are employed, it is impossible to forget the very serious risks which they would run by sinking their savings in a security so speculative as are the shares of the average joint-stock company—a security in which no ordinarily prudent middle-class man would for one moment dream of investing the funds comprised in a marriage settlement.

It is, certainly, most probable that, if the Labour Co-partnership plan were extensively adopted, the small share in management, which employees are likely to obtain under this system, would, all too often, be found to have been very dearly purchased. It may be said that any share in management is better than none, and that, in order to gain even a minute share in control, a workman may well think it worth while to run the risk of losing his savings when the company smashes. But then, it must not be lost sight of that the plan, which Labour Co-partnership proposes for enabling employees to acquire a right to have a voice in the management of the enterprises in which they are employed, is not the

taking up shares. The workmen were also allowed to elect, and did elect one of themselves as a director. But at no time do the workmen appear to have been able to exercise any sort of control in the management of the company, in whose affairs they had practically no voice.

only method which has been proposed for attaining this object. For, under the ordinary wage-system (as has been pointed out in preceding pages) provision can be, and in some instances is made for giving to the employees a powerful means of expressing their views as to those questions which directly affect their interests, either through their trade union, or through those joint committees of employers and employees, of which mention has been made in preceding chapters * —institutions, which, without inviting the workmen to dabble in shares, or making any pretence of giving them a right to take part in the financial control of an industrial undertaking, fully recognise their claim to be heard in regard to workshop arrangements of every kind.

It remains to consider how far this Labour Co-partnership plan is likely to succeed in promoting the maintenance of industrial peace. This important question is one, which cannot be answered with any degree of certainty. By some of those, by whom the adoption of this plan is advocated as a remedy for industrial strife, it is hoped that the workman, who has money invested in stock of the company by which he is employed, will refuse to join in any attempt to secure an advance or to resist a reduction in wages by means of a strike. Thus, Mr. Livesey, by whom (see *ante*, p. 273) the practice of increasing by 50 per cent. the bonus of any employee of the South Metropolitan Gas Company who invests one-half of

* As to joint committees in non-profit-sharing firms, see p. 79; as to those in profit-sharing firms, see pp. 275, 276.

his bonus in stock of the company was introduced, has stated that "the idea of making the workmen shareholders became a fixed purpose on reading of the Taff Vale engine-driver, who, at the time of the strike on that railway, about 1890, refused to come out, remarking that 'he could not strike against himself,' he holding," says Mr. Livesey, "if my memory is correct, £5 of the company's stock" (*Times*, January 5th, 1897). Certainly, if in a case like this a large number of the company's employees held each, not £5, as here supposed, but say £100 of its stock, they might very possibly feel disinclined to join in a strike movement, which, if it succeeded in increasing their wages, might also, by augmenting the working expenses, diminish their dividends. But the men owning a really substantial sum of stock will always be a small minority, and just that minority of elder men, who, not liking to see the money of the trade union spent on strikes, for fear of possible jeopardy to the funds available for satisfying their claims in respect of sick and superannuation benefits, may usually be counted upon, under any circumstances, and quite apart from their being stockholders, to use their influence, so far as it goes, in favour of a pacific policy; while the younger and more venturesome members of the staff, who will not as yet have acquired any considerable amount of stock, will probably put aside all thought of the risk of diminishing the dividend of the company, vote in favour of aggressive measures, and, the strike once declared, stand loyally by their trade union. Still,

the introduction of a system, under which large numbers of working-men should become shareholders in the concerns by which they are employed, might in many cases, especially in cases in which no strong trade union feeling has grown up among the workmen, do a great deal to destroy the cohesion of trade union combination, where a union exists, and to delay or prevent the formation of a trade union where none exists, and might develop in the minds of the employees a spirit of submission, which would go far to secure the avoidance of industrial conflicts in the Labour Co-partnership companies.

Whether the maintenance of industrial peace on terms such as these would, on the whole, be an advantage or a disadvantage to the working-men employed in the establishments adopting the modification of the ordinary wage-system proposed by the advocates of Labour Co-partnership, or to the working-classes in general, is a question of no little interest, which, however, it would be impossible adequately to discuss without entering upon matters altogether beyond the scope of our present subject —the method of remuneration. But without going into the wide question, whether the weakening of the power of trade union combination, which would appear to be a possible result of the extension of these Co-partnership arrangements, would tend to raise or to lower wages generally, it is proper to point out one somewhat serious danger, to which the Labour Co-partnership plan seems, of necessity, to expose the workman—the danger of his being com-

pelled to pay for the incompetence of his employers. For, while the trade union policy is to insist upon the payment by all employers in a trade alike of an uniform standard *minimum* wage, under the Labour Co-partnership system, on the other hand, the employee shareholders, whose savings are invested in the shares of a company which has got into financial difficulties, may find themselves obliged, in order to stave off the liquidation of the concern, to submit to having their wages reduced. Nor would the consequences of this reduction end with the loss incurred by the employees of this particular factory. It may be taken for granted that, after a few financially unsound Co-partnership firms had induced their workmen to agree to their wages being reduced, other employers in the trade concerned would soon complain that it was impossible to compete with these firms while obliged to pay higher wages than their rivals, and would, in their turn, do their best to break down the standard rates.*

So much as to Labour Co-partnership in ordinary joint-stock companies. With regard to the application of this principle in workmen's co-operative societies, it may occur to many that, if the shares of middle-class

* As instances, in which the employees of undertakings conducted on the Labour Co-partnership plan have given up their wages in order to meet financial difficulties in which these concerns had become involved, may be mentioned the case of the Cobden Memorial Mills Company, formed in 1866 at Sabden, Lancashire, where the employees in 1885 agreed to forego eight weeks' wages during the next twelve months to the amount of £2,000, this company being wound-up in 1887 without having at any time paid any bonus

companies are, as a rule, somewhat unsuitable investments for the working-classes, then working-men ought to be even more strongly warned against putting their savings into shares in working-class co-operative undertakings. For the idea, that enterprises owned and managed by working-men almost invariably fail, is very widely prevalent. This, however, is an idea, which the facts of the case do not altogether bear out. It is, indeed, indisputable that a large number of our working-class co-operative societies have not succeeded in attaining financial success; but the reader, who will turn back to page 322, will see that the goods sold by our workmen's co-operative societies in 1896 were of the aggregate value of nearly £60,000,000, of which about £52,000,000 is the value of "distributive," and not far from £8,000,000 that of "productive" sales. Does this look like failure? Even if it be alleged that those forms of Co-operation, in which the employees are allowed to share in profits and management, are the least financially successful part of the Co-operative Movement, it may be pointed out that, taking separately the ninety-one co-operative "productive" (manufacturing) associations of this class comprised in our figures (many of which are,

to its employees, and that of Wm. Thomson & Sons (see *ante*, pp. 274-276), where the employees paid in 1890 out of their wages a considerable sum in order that the shareholders might receive in full the dividend of 5 per cent., which they would otherwise not have received at that time, owing to the loss incurred by the business in the preceding year, and which, if unpaid, would have been a first charge on subsequent profits.

no doubt, of recent formation, but not a few of which have had a fairly lengthy existence), we find the sales of these societies in 1896 to have been (as the reader will remember) of the value of between £800,000 and £900,000. Would it, then, be possible to assert, without reserve, that Industrial Co-operation carried out on the Labour Co-partnership lines is a total failure?

It cannot be denied that, if co-operative societies on the Labour Co-partnership plan were to multiply extensively, the employee shareholders of these concerns would, in many cases, be not unlikely to lose a considerable part of their hard-earned money. Nor, of course, will the danger, which was shown to exist in the case of middle-class Co-partnership firms, that, in order to stave off liquidation, the employees may find themselves compelled to sacrifice part of their wages, so entailing consequences most seriously prejudicial not alone to themselves but also to workmen in the trade generally, be in any less degree present in the case of co-operative societies formed on Labour Co-partnership lines.* At the same time, it must not be forgotten that, whatever risks may be incurred by the working-classes owing to the adoption of this Labour Co-partnership plan, if a working-man invests his bonus and other earnings in the shares of a co-

* In the case of the Burnley Self-Help Society, a co-operative association engaged in cotton weaving (see *ante*, p. 342 *n.*), the employees, under circumstances of this nature, paid, out of their wages, to make up losses, a large amount of money. See *Co-operative Production*, by B. Jones, p. 319.

operative society by which he is employed, and which is carried on upon these lines, he at any rate in many cases obtains, by means of this investment, a really considerable share in the management of the concern —a share far more substantial than he is likely to obtain in any ordinary middle-class company.

That a great number of our co-operative associations carried on upon Labour Co-partnership lines have met with financial disaster, no one acquainted with the facts can deny; but that many of these societies exhibit every sign of financial prosperity is beyond question. No doubt, there exist in all undertakings, in which the employees are allowed to possess a really effective share in the management, difficulties, the serious character of which cannot be ignored. Where workmen are to a large extent their own masters, there the maintenance of discipline is, in the absence of great self-restraint and no little self-sacrifice on the part of the employees, far from easy. The directors of the concern must be selected, not for any showy gift of eloquence, but for their proved capacity; and the unwillingness of workingmen to see one of their own number raised in rank above his fellows and remunerated at a much higher rate than they can themselves command must not be allowed to prevent a proper position and an adequate salary being granted to able and honest managers, to whose directions obedience must be ungrudgingly accorded. These are among the foremost requirements which must be met, if the principles of Labour Co-partnership are to be successfully

applied in co-operative enterprises. That these requirements were seldom met in the early days of Industrial Co-operation, cannot be denied. Equally undeniable is it that in the practice of our working-men co-operators of to-day all these necessary conditions of success are being fulfilled in a much greater measure than at any previous time.

To what extent we may look to the development of Industrial Co-operation of the type now under consideration for the solution of the numerous difficult questions affecting the interests of labour that press for solution, it may be difficult to decide. In any case, these experiments are full of interest. If the gradual growth of a higher social morality shall bring with it the rise of a spirit of closer comradeship and the development of habits of voluntary discipline, while the general diffusion of educational facilities day by day improves the intellectual status of the working-classes, then some of the gravest of the obstacles to the successful realisation of the ideal of "self-employment" will have been removed. Whatever be the future reserved for the co-operative method, it is certain that every genuine attempt to carry out this system possesses features entitling it to command our hearty sympathy. For the co-operative method, training men, as it does, to habits of self-control, developing, as it does, mutual goodwill between loyal associates, and promoting, as no other method can in equal measure claim to do, self-respect and self-reliance, merits the admiration of all who have at heart the welfare of their fellow-citizens.

APPENDIX A.

PROFIT-SHARING FIRMS.*

PART I.

Past Profit-sharing.

Firms in which Profit-sharing is no longer in force. †

Duration of Profit-sharing.	Name and Address of Firm.	Nature of Business.	Cause of Cessation of Profit-Sharing.
1829-?	Lord Wallscourt, co. Galway, Ireland.	Farming ...	?
1865-75	Henry Briggs, Son, & Co.. Limited, Whitwood and Methley Collieries, Yorkshire.	Coal mining ...	Disputes with employees.
1855-?	Clayton Plate and Bar Iron Co., Limited.	Iron manufacture	?
1865-68	Greening & Co., Limited, Salford.	Wire netting, &c., manufacture.	Liquidation.
1865-88	Milliners and Dress Makers Company, Limited, London.	Millinery and dressmaking.	Want of financial success.
1866-?	South Buckley Coal and Fire Brick Company, Limited.	Coal mining and fire-brick making.	Liquidation.

* Compiled from *Report on Profit-sharing*, 1894, and *Labour Gazette*, July, 1895, July, 1896, and July, 1897.

† Up to June 30th, 1897.

Duration of Profit-sharing.	Name and Address of Firm.	Nature of Business.	Cause of Cessation of Profit-sharing.
1866-72	John Curwen, Plaistow and London.	Music printing and publishing.	Dissatisfaction of employees; increase in wages granted.
1866-72	William Lawson, Blennerhasset, Cumberland.	Farming ...	Sale of farm.
1866-74	Fox, Head, & Co., Middlesbrough.	Iron manufacture	Dissatisfaction of employers with results.
1866-87	Cobden Memorial Mills Company, Limited, Sabden, Lancashire.	Cotton manufacture.	Liquidation.
1867-?	Lloyd and Summerfield, Co-partnership, Limited, Birmingham.	Glass manufacfacture.	?
1867-?	Wardle, Blythe, & Co., Denaby Co-operative Pottery.	Pottery manufacture.	?
1867-70	John and Henry Gwynne, Hammersmith Ironworks, London.	Engineering works.	Dissatisfaction of employers with results.
1868-72	Price's Patent Candle Company, Limited, London.	Candle manufacture.	Concession of shorter working day.
1870-?	North of England Industrial Coal and Iron Company, Limited, Middlesbrough.	Coal and iron mining and iron smelting.	Dissatisfaction of employers with results; disputes with employees.
1871-74	Lord George Manners, Ditton Lodge Farm, near Newmarket.	Farming ...	Death of employer.
1871-77	Benjamin Collins, London.	Bookbinding ...	Dissatisfaction of employer with results.
1872	Troughton & Simms, London and Charlton.	Mathematical instrument making.	Apathy of employees.
1872-79	Gimson & Co., Leicester.	Engineering works.	Diminution of profits.
? 1872-?	W. Hill & Son, London.	Baking	Dissatisfaction of employers with results.
1872-84	Spottiswoode & Co., New Street Square, London.	Printing ...	Diminution of profits, chiefly through competition.

Duration of Profit-sharing.	Name and Address of Firm.	Nature of Business.	Cause of Cessation of Profit-sharing.
1873-77	John Thomasson & Son, Bolton.	Cotton spinning	Diminution of profits, and dissatisfaction of employers with results.
1874	M. Wright & Sons, Leicester.	Elastic web manufacture.	Dissatisfaction of employers with results; dispute with employees.
1876-91	Hamilton & Co., London.	Shirt, collar, and underlinen manufacture, dressmaking and millinery.	Liquidation.
1880-92?	Co-operative Needlewomen's Society, Holborn, London.	Needlework ...	Dissolution.
1882-90 1884-90	Bolton King, Gaydon, Warwick.	Farming— Radbourne Manor Farm. Ufton Hill Farm.	Losses.
1883-89	Tangyes, Limited, Birmingham.	Engineering works.	Substitution of a fixed rate of interest, to avoid undue publicity.
1883-93	Decorative Co-operators' Association, Limited, afterwards D'Oyly & Co., Limited, London.	House painting and decorating.	Liquidation.
1885-87	Working Women's Co-operative Association, Limited, London.	Shirt and dress-making.	Want of success; business transferred.
1885-94	Needlewomen's Co-operative Association, Limited, London.	Underlinen, &c., manufacture.	Want of success; dissolution.
1886-94 1888-94	Earl Grey,* Howick, Lesbury, Northumberland.	Farming— Howick Farm. Chevington Moor Farm.	Transition from one form of cultivation to another.

* Continues to practise Profit-sharing on another farm, see *post*, p. 374.

Duration of Profit-sharing.	Name and Address of Firm.	Nature of Business.	Cause of Cessation of Profit-sharing.
1886-95	Hazell, Watson, & Viney, Limited, London, and Aylesbury.	Printing ...	Profits had not for some time allowed payment of bonus under scheme.
1886-97	Earl Spencer	Farming, Glebe Farm, Harleston.	Want of success.
1887-91	Waterman & Co., Bristol.	Boot manufacturers.	Firm gave up manufacturing.
1887-91	Workwomen's Co-operative Association, Limited, London.	Shirtmaking and tailoring.	Want of success; liquidation.
1887-95	H. D. Young & Sons, Edinburgh.	Leather merchants, &c.	Dissatisfaction of employers with results.
1887-96	Circle Co-operative Printers' Society, London, formerly Circle Co-operative Printing Company, Belfast.	Printing and publishing.	Dissolution.
1889-90	Aitken, Dott, & Son, Edinburgh.	Framemaking ...	Apathy of employees.
1889-91	J. & S. Wood, Westbourne Park, London.	Laundry work ...	Dissatisfaction of employers with results.
1889-92?	Peto Brothers, London	Building ...	Job finished; discontinuance of business.
1889-94	Thomas Scott, Newcastle-on-Tyne.	Printer, publisher and stationer.	Dissatisfaction of employer with results.
1890-91	Bailey, Nokes, & Co., Limited, Birmingham.	Rolling mills and ammunition making.	Want of success.
1890-91	General Service Co-operative Stores, Limited, London.	Stores	Liquidation.
1890-91	Central Co-operative Stores, Limited, London.	Stores	Liquidation.
1890-91	Browett, Lindley, & Co., Limited, formerly Salford, then Patricroft, near Manchester.	Engineering works.	Special circumstances.
1890-91?	Drake & Gorham, London.	Electrical engineering.	Job finished?
1890-91	Joseph Bromhead, Westbury, nr. Bristol.	Laundry work ...	Dissatisfaction of employer with results.

Duration of Profit-sharing.	Name and Address of Firm.	Nature of Business.	Cause of Cessation of Profit-sharing.
1890-92	G. Hubbard, London...	Building ...	Want of success.
1890-92	G. Holloway, Temple Guiting, Gloucestershire.	Farming ...	Death of employer.
1890-93	Kensington Co-operative Stores, Limited, London.	Stores	Want of success; reconstruction.
1890-93	London Co-operative Supply Stores, Limited, London.	Stores	Liquidation.
1890-93?	London, Deptford, and Greenwich Tramways Company, formerly Southwark and Deptford Tramways Company, London.	Tramways ...	Apathy of employees.
1890-94	McVitie and Price, Edinburgh.	Biscuit manufacturers.	Destruction of works by fire; system in abeyance.
1890-94	C. Joyner & Co., Birmingham.	Chandelier, &c., manufacturers.	Conversion of business into limited company.
1890-95	Archibald Edmeston & Sons, Salford.	Engineering works.	Dissatisfaction of employers with results.
1891-93?	Edward Tuke & Co., Bradford and Leeds.	Wholesale produce merchants.	?
1891-93	Joseph Collard, London.	Printing and stationery.	Dissatisfaction of employer with results.
1891-94	Phillips & Co., Wrexham.	Teamen and grocers.	Conversion of business into limited company.
1891-94	Alfred Hickman, Wolverhampton.	Iron smelting ...	Dissatisfaction of employer with results.
1891-95	Crompton & Co., Limited, London and Chelmsford.	Electrical engineers.	Scheme not taken up by employees generally.
1891-97	John Barbour & Co., Belfast.	Flax spinning ...	Bad state of trade.
1892	Robert Mushet & Co., Bonnington Ironworks, Leith.	Engineering works.	Dissatisfaction of employers with results.
1892	Welsh Liberal Newspaper Company, Limited, Swansea.	Newspaper printers and publishers.	Want of success?

Duration of Profit-sharing.	Name and Address of Firm.	Nature of Business.	Cause of Cessation of Profit-sharing.
1892-93	Tobacco Corporation, Limited, London.	Tobacco manufacture.	Liquidation.
1892-94?	John Ratcliffe, Bolton	Decorator ...	Dissatisfaction of employer with results.
1892-94	John Williams & Sons, Limited, Didsbury, near Manchester.	Bakers, grocers, &c.	Dissatisfaction of employers with results.
1892-95	Raithby, Lawrence, & Co., Limited, Leicester and London.	Printers, &c. ...	Voluntary liquidation and re-construction of company.
1892-95	Peel Brothers, Lincoln	Corn merchants and millers.	Dissatisfaction of employers with results.
1892-96	Petty & Sons, Limited, Leeds.	Printers and manufacturing stationers.	Dissatisfaction of employers with results; share-purchase system substituted.
1893-95	Ideal Club, London ...	Restaurant and sale of provisions.	Failure to earn profits.
1895-96	Wm. Hancock & Co., Limited, Cardiff.	Brewers... ...	Dissatisfaction of employers with results.
1895-96	N. J. Powell & Co., Limited, London.	Vellum-binders and pocket-book makers.	Changes in business.
1895-97	R. Binns & Son, Cross, nr. Axbridge, W.S.M.	Fruit growers and nurserymen.	Transfer of business.
1895-97	White Stile Laundry, Brentford.	Laundry ...	Transfer of business.

PART II.

Present Profit-sharing.

Firms in which Profit-sharing is now in Force.*

Date of Adoption of Profit-sharing.	Name and Address of Firm.	Nature of Business.	How Bonus Treated.†
1865	Jolly & Son, Bath	Silk mercers, drapers, &c.	C.
1866	Fox Brothers & Co., Limited, Wellington, Somerset.	Woollen manufacture	C.
1869	Fletcher & Son, Davey Place, Norwich.	Printing	?
1873	Agricultural and Horticultural Association, Limited, 3, Agar Street, Strand, W.C.; and at Deptford.	Supply and manufacture of artificial manure, oil-cakes, seeds, &c.	C. P.
1876	Goodall & Suddick, Cookridge Street, Leeds.	Stationery and printing.	C.
1876	Women's Printing Society, Limited, 66, Whitcomb Street, London, W.C.	Printing	C.

* At June 30th, 1897. Compiled from *Report on Profit-sharing*, 1894, *Labour Gazette*, July, 1895, July, 1896, September, 1896, and July, 1897.

† C = paid in cash; P = credited to Provident Fund; S = invested in shares in the undertaking; C. P. = partly paid in cash, partly credited to Provident Fund; C. S. = partly paid in cash, partly invested in shares in the undertaking; P. S. = partly credited to Provident Fund, partly invested in shares in the undertaking.

Date of Adoption of Profit-sharing.	Name and Address of Firm.	Nature of Business.	How Bonus Treated.†
*1878	Sir W. G. Armstrong, Whitworth & Co., Limited, Elswick Works, Newcastle-on-Tyne.	Engineering and shipbuilding.	C.
1878	Cassell & Co., Limited, La Belle Sauvage, Ludgate Hill, London, E.C.	Printing, publishing, and bookbinding.	P.
1880	William Jacks & Co., 7, Royal Bank Place, Glasgow; and at Middlesbrough, London, and Grangemouth.	Iron merchants ...	C.
1881	Holmes & Co., Bird Street, Lichfield.	Coach-making ...	C. P.
1881	Birmingham Coffee House Company, Limited, Cobden Chambers, Birmingham.	Catering and hotel .	C.
1882	Brooke, Bond & Co., Limited, 17 and 18, St. Dunstan's Hill, London, E.C.; and at Manchester, Leeds, and Bradford.	Tea blending and packing.	C.
1883	C. Fidler, Royal Berkshire Seeds Stores, Reading.	Seedsman, potato grower, farmer, and fruit salesman.	C.
1884	A. De St. Dalmas & Co., 40, Belgrave Gate, Leicester.	Manufacturing chemists.	C.
1884	Perrott & Perrott, Limited, Tenter Street, Moorfields; and Featherstone Street, City Road, London, E.C.	Packers, clothworkers, and finishers; shipping and forwarding agents.	C. P.
1884	Blundell, Spence & Co., Limited, Hull and London.	Colour, paint, and varnish manufacturers, oil boiling and refining.	C.
1885	The William Davies Company, Limited, Beachell Street, Toronto, Canada.	Pork packers ...	C.

* Date of adoption by Sir Joseph Whitworth & Co., Limited, Openshaw, Manchester, whose business was in 1897 amalgamated with that of Sir W. G. Armstrong, Mitchell & Co., Limited, the profit-sharing scheme being then extended to the united undertaking.

Date of Adoption of Profit-sharing.	Name and Address of Firm.	Nature of Business.	How Bonus Treated.†
1886	J. W. Arrowsmith, 11, Quay Street, Bristol.	Printing and publishing.	C.
1886	Burroughs, Wellcome & Co., Snow Hill Buildings, London, E.C.	Manufacturing chemists.	C.
1886	Earl Grey, Howick, Lesbury, Northumberland.	Farming (Learmouths Farm).	C.
1886	Wm. Thomson & Sons, Limited, Woodhouse Mills, Huddersfield.	Woollen and worsted manufacture.	P. S.
1887	John Boyd Kinnear, Kinloch, Fifeshire.	Farming	C.
1887	Lord Wantage, K.C.B., Lockinge, Wantage, Berks.	Farming	C.
1887	Ross & Duncan, Whitefield Works, Govan, Glasgow.	Engineering works...	C. or C. P., as employees decide.
1888	S. & E. Collier, Grovelands, Reading.	Bricks, pipes, tiles, and pottery making.	C.
1888	Walker, Sons & Co., Limited, Auckland House, 36, Basinghall Street, London, E.C.; and Colombo, Ceylon.	Engineering works...	C. P.
1888	Coventry Gas Fitting, Electrical and Engineering Company, Limited, 20, High Street, Coventry.	Gas, electrical, and general engineers	C. P.
1888	Binns & Co., Limited, 26, Market Place, Derby.	Oatmeal and corn factors, seedsmen, &c.	C. P.
1888	Richard Binns, Cross, near Axbridge, W. S. M.	Fruit farming ...	C. P.
1888	Thomas Bushill & Sons, Coventry.	Manufacturing stationers.	C.
1889	W. Rowntree & Sons, 33-39, Westborough, Scarborough	Drapers, &c. ...	C. P.
1889	J. H. Ladyman & Co., King's Lynn.	Wholesale and retail grocers.	C.
1889	Sampson Low, Marston & Co., Ltd., St. Dunstan's House, Fetter Lane, London, E.C.	Publishers and export merchants.	C.

Date of Adoption of Profit-sharing.	Name and Address of Firm.	Nature of Business.	How Bonus Treated.†
1889	A. H. Taylor, trading as Henry Taylor & Sons, and Johnson & Co., 12, Castlegate, Malton.	Wholesale and retail grocery and provision business.	C.
1889	Western Tanning Company, East Street Tannery, Bedminster, Bristol.	Tanning	C.
1889	New Welsh Slate Quarry Company, Limited, Festiniog, N. Wales.	Slate quarrying ...	C.
1889	Butler & Tanner, Selwood Printing Works, Frome.	Printing.	C.
1889	Hele Paper Company, Limited, (formerly Hepburn & Co.), Cullompton, Devon.	Paper-making ...	C. P.
1889	Robinson Brothers, Limited, West Bromwich and Knottingley.	Tar distilling ...	C. P.
1889	Avalon Leather Board Company, Street, Somerset.	Manufacture of leather board.	C.
1889	A. B. (manufacturers in Midlands).	Manufacture ...	C.
1889	W. D. and H. O. Wills, Limited, Bristol and London.	Tobacco manufacture	C.
1889	South Metropolitan Gas Company, Old Kent Road, London, S.E.	Gasworks	C. and C. S.
1889	Christ, Thomas & Brothers, Limited, Broad Plain, Bristol.	Soap and candle manufacture.	C.
1889	Lee & Hunt, Arkwright Works, Nottingham.	Engineers' machine toolmaking.	C.
1890	Clarke, Nickolls & Coombs. Limited, Hackney Wick Works, London, N.E.	Confectionery manufacture.	C. P.
1890	Robert Martin, Crown Printing Works, West Hartlepool.	Printing	C.
1890	Newman & Son, 27, Middlesex Street, Bishopsgate, London, E.	Printing	C.
1890	Thomas Hailing, Oxford Works, Cheltenham.	Printing	C.

Date of Adoption of Profit-sharing.	Name and Address of Firm.	Nature of Business.	How Bonus Treated.†
1890	The Cardiff Milling Company, Limited (formerly James Tucker, Limited), Cardiff, Newport, Swansea, and Bristol.	Corn milling ...	C.
1890	C. D.	... ...	C.
1890	Edward Jackson, King's Road Corner, Reading.	Tailor and outfitter.	C.
1890	E. F.	... ...	P.
1890	Willans & Robinson, Limited, Thames Ditton and Rugby.	Engine building ...	C.
1890	New Zealand Farmers' Co-operative Association of Canterbury, Limited, Christchurch, New Zealand	Wool and grain merchants, dealers in general merchandise, and clothing manufacturers.	C.
1890	Osborne & Young, South London Granaries, 241, 243, and 245, Coldharbour Lane, Brixton, London, S.W.	Corn merchants, flour factors, and forage merchants.	C.
1890	Robert McVitie, 23, 24, and 25, Queensferry Street, Edinburgh.	Baking and confectionery making.	C.
1890	W. and J. Mackay & Co., Fair Row, Chatham.	Printers, publishers, booksellers and stationers.	C.
1890	East Anglian Fruit Preserving Company, King's Lynn.	Fruit preserving ...	C.
1890	Marquis of Hertford, Ragley, Warwickshire.	Farming (seven farms).	C.
1890	H. D. and B. Headley. Invicta Printing Works, Ashford, Kent.	Printing.	C.
1890	Idris & Co., Limited, Camden Town, London, N.W.	Mineral water manufacture.	C. P.
1890	William Terrell & Sons, Limited, Canon's Marsh Works, Bristol.	Wire and hemp rope and patent engine-packing manufacture.	C.
1891 1895	Hon. T. A. Brassey, Park Gate, Battle, Sussex.	Farming (two farms).	C. and C. S.

Date of Adoption of Profit-sharing.	Name and Address of Firm.	Nature of Business.	How Bonus Treated.†
1891	William Lawrence & Co., Limited, 64, London Road, and 81, Traffic Street, Nottingham.	Cabinet-making, &c.	C.
1891	J. D. Cartwright & Co., corner of Adderley and Darling Streets, Cape Town, South Africa.	Wholesale and retail provision merchants, and importers of glass, hardware, china, &c.	C.
1891	Thomas Brakell, Limited, 58, Dale Street, Liverpool.	Printing	C.
1891	Franklyn, Davey & Co., 12, Welch Back, Bristol.	Tobacco manufacture	C.
1891	G. H.	Worsted and woollen manufacture.	C
1891	R. H. & S. Rogers, Limited, 9 to 12, Addle Street, Wood Street, London, E.C., and Coleraine, Ireland.	Shirt and collar manufacture.	C.
1891	Waltham Brothers, Limited, Stockwell, London, S.W.	Brewing	C. P.
1891	T. S. Simms & Co., Limited, St. John, New Brunswick, Canada.	Brush and broom manufacture.	C. P.
1891	Women's Work Association, 3, Promenade, Cheltenham.	Embroidery, &c. ...	?
1892	John Devereux & Son, 128, 129, High Street, and Kirkley Road, Lowestoft.	Grocers and provision and wine and spirit merchants.	C.
1892	Unwin Brothers, 27, Pilgrim Street, Ludgate Hill, London, E.C., and Woking.	Steam printers and stationers.	C.
1892	Coombs' "Eureka" Aërated Flour Company, Limited, 4, Stanford Street, Nottingham.	Prepared aërated flour factors.	C.
1892	J. K.	Manufacture ...	C.
1892	L. M.	Supply and manufacture.	C.
1892	James Johnston, Steam Saw Mills, Abbey Road, Stirling.	Wood merchant ...	C.

Date of Adoption of Profit-sharing.	Name and Address of Firm.	Nature of Business.	How Bonus Treated.†
1892	Clement Dalley & Co., Park Butts, Kidderminster.	Corn, &c., merchants	C.
1893	Brownfield's Guild-Pottery Society, Limited, Cobridge, Staffordshire Potteries.	Pottery manufacture	P. S.
1893	Brush Electrical Engineering Company, Limited, Albert Buildings, 49, Queen Victoria Street, London, E.C.; and at Edinburgh, Manchester, Newcastle-on-Tyne, Sydney, and Melbourne.	Electrical engineering works	C. P.
1893	William Parnall & Co., Limited, 108, Victoria Street, Bristol.	Shopfitting, &c. ...	C.
1893	Jesse Mundell, 124, Linthorne Road, Middlesbrough.	House painter ...	C.
1894	William Cussons, Limited, 18, Beverley Road (and at seventeen branch shops), Hull.	Grocers, provision merchants, bakers, confectioners, jam makers, and butchers.	C.
1894	Clark's Bread Company, Limited, 12, Fonthill Road, Hove, Brighton.	Baking and confectionery making.	C.
1894	Guy's Hospital Trained Nurses' Institution, 14, St. Thomas's Street, London, E.C.	Supply of sick nurses	P.
1894	Crystal Palace District Gas Company, Lower Sydenham, London, S.E.	Gasworks	C. S. and C.
1894	N. O.	Woollen manufacturers.	C.
1895	Edwin Broad, Fore Street, Redruth, and at St. Austell and Hayle.	Draper	C.
1895	Butterwith and Hunter, 25, Stanley Street, Liverpool; and at London, Manchester, and Kendal.	Provision (bacon, &c.) merchants, &c.	C.

Date of Adoption of Profit-sharing.	Name and Address of Firm.	Nature of Business.	How Bonus Treated.†
1896	Kensington Co-operative Stores, Limited (dressmaking department), Hammersmith Road, London, W.	Dressmaking, &c.	P.
1896	J. T. & J. Taylor, Limited, Blakeridge Mills, Batley.	Woollen manufacturers.	S.
1896	The Minor Industries Profit-sharing Association, Limited, Bridgetown, Barbadoes, W.I.	Agriculture (sale and purchase).	C. and Produce.
1896	Pearson & Rutter, Limited, 42, Stanley Street, Liverpool; and at Manchester and Limerick.	Provision merchants	C.
1897	Herbert Hutchinson, Station Road, Haslemere, Surrey.	Architect and builder.	C. P.
1897	Richmond & Co., Limited, Warrington, Stratford and London.	Gas engineers (manufacturers).	C. S.

APPENDIX B.

PROFIT-SHARING SCHEMES.

PART I.

General Form for a Simple Profit-sharing Scheme; Cash Bonus.*

(1.) *Method of Profit-sharing.*— From and after 1st of January, 1890, the surplus (if any) of the clear profits of the business beyond such definite sum as is for the time being reserved to the firm for their own benefit (hereinafter referred to as the "reserved limit") shall be divided into two equal parts, one thereof to be distributed gratuitously as a bonus to the employees in the manner defined by these rules, and the other to be retained by the firm.

(2.) *The "Reserved Limit."*—The present reserved

* Reprinted by permission from *Profit-sharing and the Labour Question*, by T. W. Bushill, pp. 233-237.

limit* has been communicated confidentially to , chartered accountant, and will not be altered for the first three years, if the scheme so long subsists. Thereafter it may be raised or reduced by the firm, but (unless altered during some month of January) not so as to affect the distribution of profits for the financial year current at the time of alteration. Notice of any alteration will be given to the employees in such manner as to let them know how far such alteration would have affected the last preceding distribution had it then been in force.

(3.) *Accountant's Certificate.*—The accounts of the business will be audited each year by a chartered accountant, who will certify to the employees the bonus (if any) to which they are entitled.

(4.) *Qualifications for Profit-sharing.*—The employees entitled to share in the profits for any financial year are such only as were employed at the commencement of such year, and have furnished a request to be entered on the list of profit-sharers. The acceptance of the terms herein offered is not to be in any way a condition of employment or of promotion. Profit-sharers will be free to become or remain members of any trade or friendly society.

* It is very desirable that some intimation of the possible benefit to the employees should be given when the scheme is introduced A simple style of communication would be: "If the profits during the present year equal the average of the past three years, there would be a bonus equal to weeks' wages for each participant." (T. W. B.).

(5.) *Duration of Scheme.*—The scheme is to continue in force only until the firm give notice to the employees putting an end thereto, but such notice, unless given during some month of January, will not take effect until the end of the financial year current at the time it is given.

(6.) *Method of Distribution.*—The employees' share of profits accruing in each financial year is (subject as after mentioned) to be distributed among them in proportion to their respective salaries or wages at the commencement of such year, taken for one week, exclusive of premiums, overtime, or other variable allowances. In making any year's distribution it shall be permissible to the firm to carry forward undivided to the credit of the following year's employees' share of profits any sum which, if divided, would have given to them less than one week's wages, calculated as aforesaid.

(7.) *Payment of Bonus.*—Each employee's bonus shall, within two months of the end of the financial year, be paid into his account at some savings bank, and will then become his absolute property.

(8.) *Employees leaving.*—An employee whose service ends by notice given on either side, by illness, or by death, will have a right to bonus for the financial year in which his service ends, in proportion to the portion of the year elapsed to the end of the month preceding the end of his service. Any employee leaving under circumstances other than before mentioned shall lose such right. Any sum lost to an

employee under this rule does not accrue to the firm, but goes wholly to increase the distribution to the other employees.

(9.) *Proviso in Event of Damage.*—If an employee ceases to be in the service of the firm by reason of any wilful act or default on his part causing loss or damage to the firm, or is at the time indebted to the firm, his bonus shall be applied to making good such loss or damage or to payment of such debt.

(10.) *Partnership not conferred.*—The employees or any of them will have neither the rights nor liabilities of partnership; nor are they to intermeddle or be concerned in the management or the accounts of the business.

(11.) *Alteration of Rules.*—Alterations or modifications of these rules, which experience may suggest as desirable, may from time to time be made by the firm; but such changes, unless made during some month of January, are not to take effect until the end of the financial year current at the time they are made.

(12.) *Definitions.*—In these rules, words importing the masculine gender include also females:

"Firm" includes the present members of the firm, as also any person or persons succeeding to the business;

"Business" means the business of the firm, whatever changes may take place in the nature or branches of such business or places where the same is carried on;

"Financial year" means the year from the 1st of January to the 1st of January;

"Scheme" includes all relations between the firm and employees under these rules.

Dated this day of 1890.

(Signed)

[Form of Request under Rule 4.]

_____ 18 .

To Messrs. _____

_____

I beg to request you to place my name on the list of profit-sharers, and I hereby agree to accept the rules for the time being of the profit-sharing scheme.

(Signed)

Name (in full) _____

Address (in full) _____

This form should be handed to the firm on or before February 1st.

[Form of Accountant's Certificate, Rule 3.]

_____ 18 .

I have examined the Balance-Sheet and Profit and Loss Account of Messrs. for the year ending 31st December 1890, and also the Wages List for January 1890, and certify that under the rules of the "Profit-sharing Scheme," the bonus permits of a distribution of weeks' wages for each participant, and that there remains an undivided

balance equivalent to about days' wages to be carried forward to the credit of the Employees' Bonus Fund of next year.

Chartered Accountant.

Some Alternative Rules.

An alternative "Method of Profit-sharing" found to be preferable in some cases, *e.g.*, with rapidly growing businesses. The actual percentage can, if desired, be communicated confidentially to a chartered accountant; but in such a case it would be advisable to give the employees some intimation of the addition to ordinary wages it will be possible for them to earn.

(1.) In lieu of Rules 1 and 2 above:—From and after the 1st of January 1890, per cent. of the clear profits of the business will be distributed gratuitously as a bonus to the employees in the manner defined by these rules.

An alternative "Method of Distribution," suitable to businesses in which the majority of the employees are piece-workers.

(6.) In lieu of Rule 6 above:—The employees' share of profits accruing in each financial year is (subject as after mentioned) to be distributed among them in proportion to the respective salaries or wages earned by them during such year.

If this alternative rule be adopted, the last clause in the first sentence of Rule 8 above (commencing "in proportion to") should be omitted.

PART II.

Rules of the Profit-sharing Scheme in force with Messrs. Thomas Bushill and Sons, Coventry; Cash Bonus and Provident Fund.*

(1.) *Method of Profit-sharing.*—From and after the 1st of September 1888, the surplus (if any) of the clear profits of the business beyond such definite sum as is for the time being reserved to the firm for their own benefit (hereinafter referred to as the "reserved limit") shall be divided into two equal parts, one thereof to be distributed gratuitously as a bonus to the employees in the manner defined by these rules, and the other to be retained by the firm.

(2.) *The "Reserved Limit."*—The present reserved limit has been communicated confidentially to Mr. Charles J. Angus, 43 Finsbury Circus, London, E.C., Chartered Accountant, and will not be altered

* Reprinted by permission from *Profit-sharing and the Labour Question*, by T. W. Bushill, pp. 206-212.

for the first three years if the scheme so long subsists. Thereafter it may be raised or reduced by the firm, but (unless altered during some month of September) not so as to affect the distribution of profits for the financial year current at the time of the alteration. Notice of any alteration will be given to the employees in such manner as to let them know how far such alteration would have affected the last preceding distribution had it then been in force.

(3.) *Accountant's Certificate.*—The amount (if any) available for distribution will each year be certified by a chartered accountant and will be communicated to the employees.

(4.) *Qualifications for Profit-sharing.* — The employees entitled to share in the profits for any financial year are such only as at the commencement of such year on the 1st day of September were members of the sick club, and have on or before that date delivered to the firm's cashier for the time being a certificate or other satisfactory evidence of age, and a request to be entered on the list of profit-sharers.

(5.) *Duration of Scheme.*—The scheme is to continue in force only until the firm give notice to the employees putting an end thereto; but such notice, unless given during some month of September, will not take effect until the end of the financial year current at the time it is given.

(6.) *Method of Distribution.*—The employees' share of profits accruing in each financial year is (subject as after mentioned) to be distributed among them in

proportion to their respective salaries or wages at the commencement of such year, taken for one week, exclusive (1) of premiums, overtime, or other variable allowances; or (2) of loss caused by short time. As to employees who are piece-workers, such week's wages in the case of each such worker is to be arrived at (exclusively as aforesaid) by averaging the wages earned by him during the last month of the preceding financial year. In making any year's distribution it shall be permissible to the firm to carry forward undivided to the credit of the following year's employees' share of profits any sum which, if divided, would have given to them less than one week's wages calculated as aforesaid.

(7.) *Employees' Reserve Fund.*—(*a.*) If in any year the employees' share of profits should exceed such sum as would, if divided, give a bonus to them equivalent to six weeks' wages (that is, six times the amount of the one week mentioned in Rule 6), the surplus above such sum shall go to form an employees' reserve fund.

(*b.*) This fund will remain in the hands of the firm, bearing interest at the rate of 4 per cent. per annum, and may be applied, at the discretion of the firm, in aid of a subsequent year's distribution.

(*c.*) If any such year's surplus should not be so applied within five years of its transference to the reserve fund, the same, with interest thereon, shall, at the end of such five years, be allotted to the provident funds of such of the employees as shall

then be in the employ of the firm (subject as after mentioned) under the title "Bonus from Reserve."

(*d.*) No employee shall be entitled to benefit by any "bonus from reserve" who was not a profit-sharer for the year in which the money allotted in reserve bonus was earned.

(*e.*) The allotment shall be made in proportion to the respective wages or salaries of the employees sharing in the allotment (computed in accordance with Rule 6) for the year in which the money allotted was earned.

(*f.*) It shall be permissible to the firm at their discretion to allot a "bonus from reserve" at an earlier date than provided for in clause (*c*) of this rule.

(*g.*) The accounts of this fund (whenever any monies stand therein) will be audited yearly by a chartered accountant, and submitted (confidentially) to the firm's cashier for the time being.

(8.) *Treatment of Bonus.*—The share of the profits accruing to each employee (hereinafter called "Bonus") is to be divided into three equal parts; one of these will be paid over to him within two months of the end of the financial year, and the other two parts will be credited to him in the books of the firm as a provident fund for his benefit. There will be delivered to him a pass-book in which the account of his provident fund will be entered, and which must be produced when any payment from it is demanded.*

* The whole of the bonus is now paid in cash, the change having been made "because the firm wished to be relieved of the respon-

(9.) *Employees Leaving.*—Any employee whose service ends by notice given on either side, by illness, or by death, will have a right to bonus for the financial year in which his service ends in proportion to the portion of the year elapsed to the end of the month preceding the end of his service. Any employee leaving under circumstances other than before mentioned shall lose such right. Any sum lost to an employee under this rule does not accrue to the firm, but goes wholly to increase the distribution to the other employees.

(10.) *Proviso in event of Damage or Embezzlement.*—If an employee ceases to be in the service of the firm upon or by reason of any act or default on his part causing loss or damage to the firm, or is at the time indebted to the firm, his provident fund shall be applied to making good such loss or damage or to payment of such debt. If the act be embezzlement or felony, his provident fund shall be wholly and absolutely forfeited, and shall be applied, subject as before mentioned, to such purpose, beneficial to the employees generally, as may be determined upon by the consulting committee (formed under Rule 20). Whenever this rule is called into operation, the circumstances of the case will be reported to the said consulting committee.

(11.) *As to Withdrawal of Provident Fund.*—Subject

sibility of holding this fund themselves, and the National Debt Commissioners would not accept it as a trust fund" (see *Labour Gazette*, July, 1896).

as after mentioned, no employee shall be entitled to withdraw any portion of his provident fund.*

(12.) *As to Withdrawal after Leaving.*—Subject to Rule 10, if an employee during his life ceases to be in the service of the firm from any cause, he shall remain entitled to his provident fund, but he, or any person claiming from or under him, shall not be entitled to withdraw it until such time as, if he had continued in the service of the firm, he would have been so entitled under Rule 13; provided, however, that he may be voted earlier payment if the firm and the consulting committee (formed under Rule 20) should be of opinion that exceptional circumstances existing in his case make such earlier payment advisable.

(13.) *On attaining Sixty-five Years of Age, or completing Twenty-five Years of Service.*—An employee on attaining the age of sixty-five years, or completing

* The following clause, intended to protect shares in a provident fund from being assigned by a participant or seized by his creditors, is contained in the scheme in force with Messrs. Waltham Brothers, Limited: "If an employee at any time before the deferred bonus standing to his credit has been withdrawn and actually received by him, become bankrupt, or do or suffer anything whereby the deferred bonus or any part thereof, if belonging absolutely to him, would voluntarily or involuntarily become vested in, or payable to some other person, the committee may, if they in their absolute discretion think fit, pay or apply such deferred bonus or the income thereof, or any part thereof for or towards the maintenance and support of such employee and his wife, children or remoter issue (if any), or of any one or more of them exclusive of the others in such manner and proportions as the committee shall think fit" (see *Report on Profit-sharing*, 1894, p. 170 *n*).

twenty-five years of continuous service, may, on the following 31st day of December, receive his provident fund accruing during that period. In reckoning the twenty-five years' service, service to the firm or predecessors of the firm commencing at any time since the 1st of January 1880 is to be included, but not service while under the age of twenty-one years. Any such employee, notwithstanding receiving his provident fund, if he continues on in the service of the firm will, as to future bonuses and otherwise, have the benefit of and be subject to these rules.

(14.) *In case of Marriage.*—A female employee, who, after leaving the service of the firm, marries, may thereupon claim an immediate payment of her provident fund.

(15.) *In case of Death.*—If an employee dies, his legal personal representatives will be entitled to immediate payment of his provident fund.

(16.) *Claims to be in Writing.*—In every case where an employee or any person claims payment, such claims shall be in writing, and delivered to the firm's cashier for the time being.

(17.) *In case Scheme is Discontinued.*—If the firm should put an end to the scheme, the provident funds of all the employees will become payable to them on the 31st day of December following.

(18.) *Interest on Provident Funds.*—The provident fund of each employee will, while the same remains in the hands of the firm, be credited with interest at

the rate of 4 per cent. per annum, but no interest will be allowed for any fraction of a financial year. The firm may, if they choose, deposit the provident fund of any employee or part of such fund in a savings bank, in which case the amount deposited is to be credited with such interest only as may be allowed by the savings bank.

(19.) *Security given for Provident Funds.*—The firm will give security upon property of ample value for all monies from time to time belonging to the employees' provident funds, or so much thereof as may be remaining in their hands.

(20.) *Consulting Committee.*—The sick club committee are to form a consulting committee under this scheme for the firm to consult with on any question affecting any employee, or arising under these rules, on which the firm may desire assistance; nevertheless the ultimate decision of every question is to rest with the firm.

(21.) *Partnership not Conferred.*—The employees or any of them will have neither the rights nor liabilities of partnership, nor are they or any of them to intermeddle or be concerned in the management of the business or the book-keeping or accounts of the firm.

(22.) *Giving of Notices.*—Notices or communications to the employees are to be deemed effectually given or made if given or made in writing to the consulting committee (formed under Rule 20).

(23.) *Alteration of Rules.*—Alterations or modifica-

tions of these rules which experience may suggest as desirable may from time to time be made by the firm; but such changes, unless made during some month of September, are not to take effect until the end of the financial year current at the time they are made, nor are any such changes to take effect retrospectively, so as to affect the amount of the provident fund at the time they are made of any employee. Notice of every such change will be given pursuant to Rule 22.

(24.) *Definitions.*—In these rules, unless there be something in the subject or context requiring a different construction, words importing the masculine gender include also females.

"Firm" includes the present members of the firm, as also any person or persons succeeding to the business, whether such person or persons shall be the present members, or one or more of them, together with any other person or persons, or of any other person or persons only.

"Business" means the business of the firm, whatever changes may take place in the nature or branches of such business, or places where the same is carried on.

"Sick club" means the Cow Lane Steam Works Sick Club, and "sick club committee" the committee for the time being of such club.

"Financial year" means the year from the 1st of September to the 1st of September.

"Scheme" includes all relations between the firm and employees under these rules.

"Continuous service" as also any analogous ex-

pression, means (notwithstanding temporary absences) the whole period during which the relation of employer and employee virtually subsists and there is no dismissal.

"Provident fund" includes additions thereto under Rule 7 and of interest.

Revised rules, dated this 30th day of September 1891.

(Signed) THOMAS BUSHILL AND SONS.

PART III.

Form of Agreement in relation to deposits by Employees, carrying Interest varying with Profits, in force with a Company of Manufacturers in the Midlands.*

An Agreement made the day of one thousand eight hundred and Between Limited (hereinafter called "the Company") by a director of the Company acting under the express authority of the Company of the one part and of in the county of now in the employment of the Company and hereinafter called "the Depositor" of the other part whereby it is mutually agreed by and between the Company and the Depositor that the Company will in accordance with its Memorandum and Articles of Association accept from the Depositor from time to time sums of money on deposit at interest upon the conditions and subject to the rules and regulations hereinafter contained that is to say—

* From *Report on Profit-sharing*, 1894, pp. 172-175.

1. The Depositor whilst in the employment of the Company may subject as aforesaid from time to time deposit with the Company such sums as the Company may from time to time agree to accept on deposit and may from time to time subject to the provisions hereinafter contained withdraw the same wholly or in part provided that (except for the purpose of closing the account) only sums of £10 or of some multiple of £10 may be deposited or withdrawn.

2. Upon opening the deposit account a pass-book will be delivered to the Depositor which he shall produce on depositing or withdrawing any sum and every such transaction and all credits and debits for interest shall be entered therein and the Company by its cashier or other person appointed by the Company for that purpose shall give a stamped receipt to the Depositor for every sum deposited by him.

3. The Depositor shall leave his pass-book at the office of the Company for the purpose of being made up or examined as often as shall be required by the Company. Every pass-book shall be deemed to be the property of the Company and shall be handed over to the Company by the Depositor on the final closing of his account.

4. Deposits and withdrawals may be made only on the second Wednesday in March June September and December or on such other additional or substituted days as shall from time to time be appointed by the Company. Provided always that no alteration of the quarterly days hereby appointed or of the quarterly

days from time to time to be substituted by the Company for deposits and withdrawals shall be made without one calendar month's previous notice in writing at the least being given (in manner provided by Rule 18) by the Company to the Depositor of such intended alteration and there shall always be one day at the least in every quarter of the year appointed for deposits and withdrawals.

5. One calendar month's notice in writing at the least shall be given by the Depositor of his intention to withdraw any sum but a director of the Company may by writing under his hand dispense with such notice.

6. Every such withdrawal notice shall expire on one of the days hereby appointed or to be hereafter appointed for withdrawals and upon the expiration of the required notice the whole amount specified therein or any part thereof may (subject to the proviso in Rule 1 contained) be withdrawn during the Company's business hours by the Depositor who shall give a proper receipt for the amount withdrawn.

7. Should the Depositor at the expiration of any withdrawal notice fail to withdraw the whole amount specified in such notice, such notice shall be deemed to be cancelled so far as regards the balance of the sum specified therein which shall not have been withdrawn.

8. The Company may at any time and from time to time give one calendar month's notice in writing to the Depositor (in manner provided by Rule 18) of its

intention to pay out to him such sum as shall be specified in the notice and at any time within fourteen days after the expiration of such notice the Company may pay out to the Depositor the amount specified therein or any part thereof and the sum (if any) so paid out shall be treated as a sum withdrawn by the Depositor provided that if the whole amount specified be not paid out within fourteen days from the expiration of the notice such notice shall be deemed to be cancelled so far as regards the balance of the sum specified which shall not have been paid out.

9. The Company will allow interest on the amount standing to the Depositor's credit on the 1st day of January of any year at a rate of not less than £3 per cent. and not more than £10 per cent. per annum and within those limits the rate of interest for any year shall be equal to the dividend payable for that year to the ordinary shareholders of the Company upon the amount of capital called up and paid or treated as called up and paid upon the ordinary shares of the Company.

10. Sums deposited and withdrawn by the Depositor in the course of any year shall be credited and debited respectively with interest for the time elapsing between the date of deposit or of withdrawal as the case may be and the end of that year at the rate per annum to be ascertained as provided by the last preceding rule.

11. The excess of interest credited over interest debited to the Depositor in any year shall as soon as ascertained be placed to the Depositor's credit as on

the 31st December of that year and shall be treated as a sum deposited on that date.

12. Every year the rate of interest shall as soon as may be after the same is ascertained be declared by a director of the Company at a meeting of the Depositors and the rate of interest so declared shall be accepted by the Depositor without question.

13. Such meeting shall be convened by a notice to be delivered to the Depositor or affixed in some conspicuous part of the Company's works not less than seven days previously to the date of such meeting.

14. The Depositor shall not give any information as to the rate of interest declared or any other matter in connection with his deposit account to any person or persons whomsoever without the written consent of a director of the Company.

15. All sums deposited must be *bonâ fide* the property of the Depositor and not held upon any manner of trust and a Depositor shall not borrow in any manner whatever to enable him to deposit.

16. If it shall be proved to the satisfaction of the Company that the Depositor has broken either of the last two preceding rules the Company may forthwith pay out to the Depositor the balance then standing to the credit of his deposit account without any interest beyond the amount which up to the time of such payment out shall have been placed to his credit and such balance shall be received by the

Depositor in full satisfaction and discharge of all claims and demands in respect of such account and this agreement shall thereupon cease and determine.

17. The Depositor shall not as such have any right to interfere in any way in the management of the Company's business nor acquire any of the rights or privileges of a member of the Company nor be entitled to inspect the books or accounts of the Company or call for an account of the profits thereof but the declaration of the rate of interest provided for by Rule 12 shall be absolutely binding and conclusive on the Depositor.

18. The Company may at any time give to the Depositor one calendar month's notice in writing to be sent by post to his usual or last known place of abode or to be delivered to him personally of the intention of the Company to determine and put an end to this agreement and at the expiration of such calendar month or so soon thereafter as the balance of the Depositor's account can be ascertained the Company shall pay to the Depositor the said balance and this agreement shall thereupon cease and determine. For the purpose of ascertaining the said balance interest credited and debited under Rules 9 and 10 for the then current year shall be at the rate of 5 per cent. per annum instead of at the rate which would be in accordance with the provisions of the last mentioned Rules.

19. The Depositor upon changing his address shall give immediate notice in writing to the secretary of

the Company of such change and of his new address and until such notice of change is given any notice sent to the Depositor by post to his last known address shall be valid.

20. The Company may charge the Depositor's account with the cost of every pass-book issued to him in the place of one lost or destroyed.

21. No personal liability shall as between the said and the Depositor attach to the said in respect of this agreement or anything herein contained.

In witness whereof the said on behalf of the Company and the said have hereunto set their hands the day and year first above written.

Witness to the signatures of the above named.

PART IV.

Form of Agreement in Relation to Workmen's Debentures, carrying Interest varying with Profits, in force with Messrs. Willans and Robinson, Limited.*

It is hereby agreed between Willans and Robinson, Limited, by Charles Shrewsbury Essex, their secretary, of the one part, and
of the other part, that in consideration of the faithful service to the Company of the said the Company will pay to the said so long as he remains in their employment, additional interest upon the debentures of the said Company, Nos. , which are held by the said (and so long only as they are held by him), over and above the interest at the rate of £5 per centum payable thereon in any case, as follows, viz., for each half-year in respect of which interest at a higher rate than

* From *Report on Profit-sharing*, 1894, p. 181.

5 per cent. per annum shall have been paid upon the ordinary shares of the Company, such a sum as will make up the total interest on such debentures to the same rate per cent. per annum as is paid upon the ordinary shares as aforesaid.

Such additional interest shall be payable at the same time as dividends upon the ordinary shares of the Company for the preceding half-year.

As witness the hands of the said Charles Shrewsbury Essex and of the said the day of 189 .

Witness to the signature of the said Charles Shrewsbury Essex,

Witness to the signature of the said

APPENDIX C.

APPENDIX

Bonus in "Self-Governing"

Name of Society.	Nature of Business.	Date of Establishment.	Sales in 1896.
			£
Eccles Manufacturing	Quilts and table covers	1861	18,134
Paisley Manufacturing	Woollen and cotton .	1862	72,019
Manchester Co-operative Printing	Printing	1869	67,309
Hebden Bridge Fustian ...	Fustian	1870	46,646
Airedale Manufacturing ...	Worsted and wool ...	1872	19,047
Edinburgh Printing	Printing	1873	10,737
Newcastle-on-Tyne Household Furnishing	Cabinet-making	1873	12,510

* Return for 1884 not stating ratio of bonus to wages, this year is omitted from calculation.

† Return for 1885 not stating ratio of bonus to wages, this year is omitted from calculation.

C.

Co-operative Associations (see *ante*, p. 342).

Number of employees on Dec. 31st, 1896.	Average ratio of Bonus to Wages.	Number of consecutive years (ending with 1896 but omitting 1887) to which this average relates.	Ratio of Bonus to Wages in 1896.	Name of Society.
	Per cent.		Per cent.	
84	0·6	13 *	*Nil*	Eccles Manufacturing
320	4·8	14 †	4·2	Paisley Manufacturing
403	2·6	11	2·5	Manchester Co-operative Printing
331	3·8	15	5·0	Hebden Bridge Fustian
34	2·9	12	1·3	Airedale Manufacturing
84	5·2 ‡	9	4·3	Edinburgh Printing
101	*Nil*	4 §	*Nil*	Newcastle-on-Tyne Household Furnishing

‡ Adopted Profit-sharing in 1886. Return for 1895 not stating ratio of bonus to wages, this year is omitted from calculation.

§ Registered under the Companies Acts. Returns for 1891 and 1895 not stating ratio of bonus to wages, these years are omitted from calculation.

Name of Society.	Nature of Business.	Date of Establishment.	Sales in 1896.
			£
Sheffield Cutlery	Cutlery.....	1873	1,743
Walsall Padlock	Locks, &c.	1873	16,482
Leek Silk Twist	Silk twist.....	1874	12,230
Coventry Watch	Watches, &c.	1876	3,973
Leicester Hosiery	Hosiery	1876	48,885
Northamptonshire Productive	Boots and shoes.....	1881	5,534
Assington	Farming	1883	1,031
Bozeat Manufacturing	Boots and shoes.....	1884	2,030
Bookbinders, London	Bookbinding	1885	845
Co - operative Sundries, Droylsden	Baking powder and sundries	1885	22,405
Keighley Ironworks	Machines.....	1885	7,059
Norwich Boot and Shoe ...	Boots and shoes.....	1885	2,400

* Adopted Profit-sharing in 1887. Return for 1888 not stating ratio of bonus to wages, this year is omitted from calculation.

† Return for 1885 not stating ratio of bonus to wages, this year is omitted from calculation.

‡ Return for 1882 not stating ratio of bonus to wages, this year is omitted from calculation.

§ There being no Returns for 1892 and 1894, these years are omitted from calculation.

‖ Returns for 1885, and 1894 to 1896 not stating ratio of bonus to wages, these years are omitted from calculation.

¶ Returns for 1889-92 and 1895 not stating ratio of bonus to wages, and there being no return for 1894, these years are omitted from calculation.

Number of employees on Dec. 31st, 1896.	Average ratio of Bonus to Wages.	Number of consecutive years (ending with 1896 but omitting 1887) to which this average relates.	Ratio of Bonus to Wages in 1896.	Name of Society.
	Per cent.		Per cent.	
55	5·9	8 *	7·5	Sheffield Cutlery
251	7·3	11 †	10·0	Walsall Padlock
71	6·1	12	7·5	Leek Silk Twist
40	4·0	14 ‡	6·3	Coventry Watch
194	0·9	11 §	1·7	Leicester Hosiery
50	10·4	9 ‖	not stated	Northamptonshire Productive
9	*Nil*	6 ¶	*Nil*	Assington
30	*Nil*	1 **	not stated	Bozeat Manufacturing
7	*Nil*	3 ††	not stated	Bookbinders, London
63	3·9	11	6·3	Co-operative Sundries, Droylsden
35	2·4	7 ‡‡	2·1	Keighley Ironworks
15	5·0	8 §§	3·3	Norwich Boot and Shoe

** There being no Return for 1892, and Returns for 1890, 1891, 1893, 1895, and 1896 not stating ratio of bonus to wages, these years are omitted from calculation.

†† There being no Return for 1892, and Return for 1889, 1890, 1894 and 1896 not stating ratio of bonus to wages, these years are omitted from calculation.

‡‡ Did not commence business until 1887. Return for 1889 not stating ratio of bonus to wages, this year is omitted from calculation.

§§ Did not commence business until middle 1886. Return for 1886 not stating ratio of bonus to wages, and there being no Return for 1892, these years are omitted from calculation.

Name of Society.	Nature of Business.	Date of Establishment.	Sales in 1896.
			£
Burnley Self-Help	Cotton cloth	1886	78,523
Finedon Manufacturing ..	Boots and shoes.....	1886	10,412
Leicester Boot and Shoe ...	Boots and shoes.....	1887	47,296
Raunds Productive.....	Boots and shoes.....	1887	8,310
Alcester Productive	Needles	1888	2,738
Bromsgrove Nail Forgers ...	Nails.....	1888	1,571
Co-operative Builders, Brixton	Building, &c.	1888	8,516
Dudley Bucket and Fender	Hardware	1888	14,379
Kettering Boot and Shoe ...	Boots and shoes.....	1888	29,204
Macclesfield Silk	Silk	1888	30,000
Nelson Self-Help	Cotton cloth	1888	29,029
Bristol Pioneers Boot and Shoe	Boots and shoes.....	1889	1,267

* Did not commence business until 1888. Return for 1890 not stating ratio of bonus to wages, this year is omitted from calculation.

† Returns for 1888 to 1892 not stating ratio of bonus to wages, these years are omitted from calculation.

‡ Return for 1888 not stating ratio of bonus to wages, this year is omitted from calculation.

§ Ratio of bonus to wages was 15 per cent. in 1888 and in 1889. Ratio for remaining years not stated.

|| Return for 1896 not stating ratio of bonus to wages, this year is omitted from calculation.

¶ No Return for 1888, business having only just been commenced; Returns for 1889, 1890, and 1894 not stating ratio of bonus to wages, these years (as well as 1888) are omitted from calculation.

** No Return for 1888, business having only just been commenced; Returns

Number of employees on Dec. 31st, 1896.	Average ratio of Bonus to Wages.	Number of consecutive years (ending with 1896 but omitting 1887) to which this average relates.	Ratio of Bonus to Wages in 1896.	Name of Society.
400	Per cent. 0·6	8 *	Per cent. *Nil*	Burnley Self-Help
45	2·4	4¼ †	5·8	Finedon Manufacturing
302	5·1	8 ‡	9·0	Leicester Boot and Shoe
33	15·0	2 §	not stated	Raunds Productive
40	0·8	7 ‖	not stated	Alcester Productive
55	1·3	5 ¶	3·8	Bromsgrove Nail Forgers
not stated	2·8	6 **	3·8	Co-operative Builders, Brixton
72	10·0	8 ††	10·0	Dudley Bucket and Fender
171	7·4	8 ‡‡	8·1	Kettering Boot and Shoe
260	*Nil*	1 §§	not stated	Macclesfield Silk
130	*Nil*	3 ‖‖	not stated	Nelson Self-Help
23	0·5	4 ¶¶	not stated	Bristol Pioneers Boot and Shoe

for 1893 and 1894 not stating ratio of bonus to wages, these years (as well as 1888) are omitted from calculation.

†† Return for 1888 not stating ratio of bonus to wages, this year is omitted from calculation.

‡‡ Business not commenced until 1889.

§§ 1893. Details wanting for other years. Had not commenced business in 1888.

‖‖ There being no Return for 1893, and Returns for 1890, 1894, 1895, and 1896 not stating ratio of bonus to wages, these years (as also 1888, business having been commenced only in December of that year) are omitted from calculation.

¶¶ Did not commence business until 1890. There being no Return for 1895 and Returns for 1894 and 1896 not stating ratio of bonus to wages, these years are omitted from calculation.

Name of Society.	Nature of Business.	Date of Establishment.	Sales in 1896.
			£
Burton Latimer Boot and Shoe	Boots and shoes.....	1889	2,377
London Bass Dressers	Bass dressers	1889	4,238
Oxford House Repairing and Decorating	Building, &c.	1889	643
Bradford Cabinet-makers ...	Cabinet-making, &c.	1890	5,043
Delph and District Woollen Manufacturing	Worsted and wool ...	1890	1,241
Hinckley Boot and Shoe ...	Boots and shoes.....	1890	6,568
Nantwich Boot and Shoe ...	Boots and shoes.....	1890	4,101
Barwell Boot and Shoe.....	Boots and shoes.....	1891	6,323
London Leather Manufacturing	Leather	1891	8,602
Sheffield Tailors	Tailoring	1891	551
St. Crispin Productive (Raunds)	Boots and shoes.....	1891	8,071

* 1891 and 1892 not being included in Co-operative Union Returns, and Return for 1890 not stating ratio of bonus to wages, these three years are omitted from calculation.

† Returns for 1889 and 1894 not stating ratio of bonus to wages, these years are omitted from calculation.

‡ Returns for 1890, 1892, and 1894 to 1896 not stating ratio of bonus to wages, these years are omitted from calculation.

§ Did not commence business until 1892. Returns for 1892 and 1893 not stating ratio of bonus to wages, these years are omitted from calculation.

‖ Business not commenced in 1889. There being no Return for 1890,

Number of employees on Dec. 31st, 1896.	Average Ratio of Bonus to Wages.	Number of consecutive years (ending with 1896 but omitting 1887) to which this average relates.	Ratio of Bonus to Wages in 1896.	Name of Society.
18	Per cent. details wanting	—	Per cent. not stated	Burton Latimer Boot and Shoe
17	5·1	5 *	4·6	London Bass Dressers
6	3·3	5 †	5·8	Oxford House Repairing and Decorating
35	*Nil*	3 ‡	not stated	Bradford Cabinet-makers
14	*Nil*	3 §	*Nil*	Delph and District Woollen Manufacturing
44	2·5	5 ‖	2·1	Hinckley Boot and Shoe
42	*Nil*	2 ¶	*Nil*	Nantwich Boot and Shoe
46	2·6	5 **	5·8	Barwell Boot and Shoe
52	3·1	3 ††	2·9	London Leather Manufacturing
7	*Nil*	2 ‡‡	not stated	Sheffield Tailors
32	details wanting	— §§	not stated	St. Crispin Productive (Raunds)

and Return for 1891 not stating ratio of bonus to wages, these years are omitted from calculation.

¶ Returns for 1890-1894 not stating ratio of bonus to wages, these years are omitted from calculation.

** Return for 1892 not stating ratio of bonus to wages, this year is omitted from calculation.

†† Did not commence business until 1892, which year and 1895, the Returns not stating ratio of bonus, are omitted from calculation.

‡‡ Returns for 1891, 1893, 1895, and 1896 not stating ratio of bonus to wages, these years are omitted from calculation.

§§ Did not commence business until 1893.

Name of Society.	Nature of Business.	Date of Establishment.	Sales in 1896
			£
Bolton Cabinet-making ...	Cabinet-making	1892	3,844
Calderdale Clog Sundries Manufacturing, Walsden	Clog iron, and sundries	1892	2,283
Condorrat Quarry	Quarrying	1892	2,521
Glenfield Boot and Shoe ...	Boots and shoes.....	1892	5,354
Higham Ferrers Boot and Shoe	Boots and shoes	1892	4,377
Kent Brickmaking	Brickmaking	1892	3,741
Leicester Printing	Printing	1892	2,659
Manchester Mat Makers ...	Mats, &c.....	1892	1,472
Medway Shipbuilding	Shipbuilding	1892	360
Newcastle-on-Tyne Cabinet-makers	Cabinet-making, &c.	1892	2,275
Rothwell Boot and Shoe ...	Boots and shoes	1892	9,400
Bristol Pianoforte	Pianofortes	1893	868

* Six weeks' business only in 1892.

† Did not commence business until 1893. Return for 1895 not stating ratio of bonus to wages, this year is omitted from calculation.

‡ Did not commence business until 1893, which year, Return not stating ratio of bonus to wages, is omitted from calculation.

§ Did not commence business until middle of 1894; Returns for that year and 1895 not stating ratio of bonus to wages, these years are omitted from calculation.

|| Did not commence business until 1893.

¶ Six months' business only in 1892. Returns for 1892 to 1894 not stating ratio of bonus to wages, these years are omitted from calculation.

Number of employees on Dec. 31st, 1896.	Average ratio of Bonus to Wages.	Number of consecutive years (ending with 1896 but omitting 1887) to which this average relates.	Ratio of Bonus to Wages in 1896.	Name of Society.
36	Per cent. *Nil*	2 *	Per cent. *Nil*	Bolton Cabinet-making
17	1·0	5	2·5	Calderdale Clog Sundries Manufacturing, Walsden
28	15·7	3 †	6·6	Condorrat Quarry
37	3·3	3 ‡	7·0	Glenfield Boot and Shoe
17	*Nil*	1 §	*Nil*	Higham Ferrers Boot and Shoe
26	details wanting	— ‖	not stated	Kent Brickmaking
28	4·3	2 ¶	3·5	Leicester Printing
26	*Nil*	3 **	*Nil*	Manchester Mat Makers
6	*Nil*	3 ††	*Nil*	Medway Shipbuilding
19	*Nil*	1 ‡‡	not stated	Newcastle-on-Tyne Cabinet-makers
80	0·8	3 §§	2·5	Rothwell Boot and Shoe
5	*Nil*	1 ‖‖	not stated	Bristol Pianoforte

** Six months' business only in 1892. Returns for 1892 and 1893 not stating ratio of bonus to wages, these years are omitted from calculation.

†† Did not commence business until 1893. Return for 1893 not stating ratio of bonus to wages, this year is omitted from calculation.

‡‡ Returns for 1894 and 1895 not stating ratio of bonus to wages, these years are omitted from calculation.

§§ Did not commence business until 1894.

‖‖ Only commenced business at end of 1893, for which year, and for 1895 no Returns were made; Return for 1896 not stating ratio of bonus to wages, all three years are omitted from calculation.

Name of Society.	Nature of Business.	Date of Establishment.	Sales in 1896.
			£
Kettering Clothing	Ready-made clothing	1893	18,895
Leicester (Anchor) Boot and Shoe	Boots and shoes	1893	4,420
Nottingham Bakers	Baking	1893	991
Plymouth House Painters, &c.	Building, &c.	1893	178
Co-operative Engineers, Leicester	Machines, &c.	1894	1,166
Kettering Building and Contracting	Building, &c.	1894	8,032
Macclesfield Fustian Cutters	Fustian	1894	1,057
Penketh Productive	Leather	1894	11,649
Sheffield House Painters, &c.	Building, &c.	1894	964
Sheffield Trade-Unionists' Sheep Shear Manufacturing	Cutlery	1894	not stated
Canterbury Tanners	Leather	1895	584
Mytholmroyd Manufacturing	Cotton cloth	1895	1,030
Nottingham Printing	Printing	1895	553

* Only commenced business at end of 1893; Return for 1893 not stating ratio of bonus to wages, this year is omitted from calculation.

† 1895. There being no Return for 1894, and Returns for 1893 and 1896 not stating ratio of bonus to wages, these years are omitted from calculation.

‡ Only commenced business in November, 1893.

§ Return for 1895 not stating ratio of bonus to wages, this year is omitted from calculation.

Number of employees on Dec. 31st, 1896.	Average ratio of Bonus to Wages.	Number of consecutive years (ending with 1896 but omitting 1887) to which this average relates.	Ratio of Bonus to Wages in 1896.	Name of Society.
200	Per cent. 7·3	3 *	Per cent. 6·9	Kettering Clothing
48	1·3	4	2·5	Leicester (Anchor) Boot and Shoe
2	*Nil*	1 †	not stated	Nottingham Bakers
1	3·5	3 ‡	4·0	Plymouth House Painters, &c.
12	*Nil*	2 §	*Nil*	Co-operative Engineers, Leicester
30	8·8	2 ‖	10·0	Kettering Building and Contracting
43	no details	— ¶	not stated	Macclesfield Fustian Cutters
12	9·4	¾ **	not stated	Penketh Productive
8	*Nil*	3	*Nil*	Sheffield House Painters, &c.
72	3·8	2 ¶	5·0	Sheffield Trade-Unionists' Sheep Shear Manufacturing
6	*Nil*	1 ††	*Nil*	Canterbury Tanners
18	*Nil*	1 ††	*Nil*	Mytholmroyd Manufacturing
6	4·2	1 ‡‡	4·2	Nottingham Printing

‖ Return for 1894 not stating ratio of bonus to wages, this year is omitted from calculation.

¶ Did not commence business until 1895.

** Did not commence business until 1895, when nine months' business only was done.

†† Did not commence business until 1896.

‡‡ Return for 1895 not stating ratio of bonus to wages, this year is omitted from calculation.

Name of Society.	Nature of Business.	Date of Establishment.	Sales in 1896.
			£
Blackpool Union Printers ...	Printing	1896	551
Cambridge Builders	Building, &c.	1896	431
Kettering Union Boot and Shoe	Boots and shoes	1896	1,016
London Mat and Matting ...	Mats, &c.....	1896	635

Number of employees on Dec. 31st, 1890.	Average Ratio of Bonus to Wages.	Number of consecutive years (ending with 1896 but omitting 1887) to which this average relates.	Ratio of Bonus to Wages in 1896.	Name of Society.
18	Per cent. details wanting	—	Per cent. not stated	Blackpool Union Printers
7	5·0	1	5·0	Cambridge Builders
29	details wanting	—	not stated	Kettering Union Boot and Shoe
not stated	*Nil*	1	*Nil*	London Mat and Matting

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